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THE

WESTERN AND SOUTHERN

MEDICAL RECORDER,

EDITED BY

JAMES CONQUEST CROSS, M. D.

Professor of the Institutes of Medicine and Medical Jurisprudence in Transylvania University, and late Professor of Materia Medica and Therapeutics in the Medical College of Ohio.

BOSTON MEDICAL LIBRARY ASS'N. MAR 23 1898

VOLUME I.

LEXINGTON:
PRINTED AND PUBLISHED BY WILL. R. HARVEY.

1841 - 1842.

CATALOGUED
MAR 1993

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No. 1. LEXINGTON, KY. NOVEMBER, 1841. Vol. 1.

LECTURE ON SYSTEMS IN MEDICINE.

BY THE EDITOR.

On a former occasion, when opening a course of medical instruction in the Medical College of Ohio, I undertook to prove, that the labours of systematic writers and teachers had not contributed, materially, to the advancement of the science. Nor can they while it remains in its present fluctuating state. Indeed, we are of opinion, that on the occasion referred to, it was clearly proved that so far from advancing, they have rather retarded its progress. While, therefore, the spirit of system which has, for so many ages, held complete dominion over the medical mind continues to maintain its ascendency, we cannot entertain a rational hope that the art of healing will or can be extricated from the alluvies of conjecture and fable in which it has been left by the successive deluges of systematic theorists.

The state to which medical science has been reduced throughout the great plain of the Mississippi by the arrogance of system, loudly and imperatively appeals to those holding stations of influence and importance, to make some steady and determined effort to restore it to its ancient dignity, respectability and usefulness; to redeem it from the state of absolute bondage under which industry has been paralyzed, zeal extinguished, opinion fettered, and the independence of individual will rendered a mere mortmain and a tinkling symbol. This is not a fancy

sketch—it is a declaration of the simple truth; of which all those who have conversed or corresponded with the physicians of the West or South must be satisfied. The influence which a certain system has exerted over the practice of medicine in this country must be familiar to all, in or out of the profession. For years, its reign was extensive and triumphant, and during that time the medical mind seemed completely turned from the path of safety by the illusive glimmerings of an *ignis fatuus.* Few dared to question its infallibility, and still fewer had courage to arraign it before the tribunal of professional opinion. In silence and secrecy it was suffered to wind its insidious way into the confidence of a listless and an unconcerned public. The few, however, who impeached its veracity were both intrepid and enlightened, and in terms of unmeasured condemnation they denounced its principles as the most wild and extravagant that ever charmed the eye of an enthusiast, and its practice as too prejudicial for fanaticism to favour, or human patience to contemplate.

But our business, on this occasion, is not so much with the errors and absurdities of a particular system, or the prejudices, partialities, and personal interests that may be rendered subsidiary to its popularity, as to the great and malign influence, which systems in general, have exerted over the fortunes of practical medicine, or as it is more technically and properly called, therapeutics. Their tendency to limit the resources of the art and to cramp and embarrass the exertions of the enterprising physician, has not commanded the attention to which it is entitled. The objects towards which he should direct his energies, are to subdue mental anguish and to cure or palliate bodily suffering. In the way of the accomplishment of these purposes, no obstacle should be permitted to interpose.

In despite, however, of the efforts that have been made to secure these obvious ends of the healing art, numerous difficulties have intervened, which, have in a great degree, prevented their attainment. Amongst those causes that have had the most signal agency in retarding the progress of therapeutics, the various systems of medicine that have at different times prevailed, may, doubtless, be regarded as having been pre-eminently powerful and conspicuous.

An enlarged and a comprehensive as well as a thorough acquaintance with the facts in medicine is essential to the induction and establishment of enlightened general principles. For this the

science is in two uninstructed a state. The facts observed are not sufficiently numerous, nor have they been sifted and examined with sufficient accuracy. This, however, has constituted no obstacle to the impetuous career of the headlong systematist. He hurriedly draws his conclusions, and afterwards, with inconsiderate haste, pretends to analyse the facts. He thus builds a temple which crumbles before the shock of opposition, like the palace of ice which was erected on the river Neva, by one of the Empresses of Russia, that filled with rapture the eye of every beholder, but which vanished into thin air before the dissolving rays of the vernal sun.

Systems are not deduced from a general, but a partial view of the facts of the science. Instead of embracing the whole field they take possession of some particular corner, a part of it, which is cultivated with extreme zeal to the total neglect of the balance. The unavoidable tendency of this exclusiveness, is to give to investigation and research a particular direction, and to the science an imposing but a fallacious character. This concentration of attention on a particular series of phenomena developes fully the facts connected with it, but sheds upon the neglected and untrodden parts of the science a feeble and sepulchral light, which is much more apt to allure and bewilder in the dark and confused labyrinths of error, than to guide and direct the uncertain footsteps of the honest inquirer, through the intricate mazes of prejudice and opposition, to the temple of truth.

When we reflect on the jarring and conflicting opinions that have torn and distracted the science, as well as the many revolutions through which it has passed, it would appear, that the mind of man cannot be restrained within the safe and certain limits of experimental truth, or prevented from overleaping the boundaries of legitimate observation. As we have already intimated, the author of no system, has been satisfied to restrict his conclusions to the nature and number of facts observed by him, but has precipitately assumed, that all other facts are similar to those that have fallen under his own eye, and that the principle drawn from them, embraces and explains all the phenomena of the science.—Wholly engrossed with a single thought, the glittering meteor of his brain so dazzles and delights him, that no other object can be seen, even though it were reflected in the light of the meridian sun. To it, phenomena the most unlike in their character are precipitately referred, and with the explanation which it furnishes of them, he is

perfectly enamoured, though palpably inconsistent with reason, and irreconcilable with the facts of observation. Around the thought which has bewildered his mind and rendered it incapable of analytic research he draws a magic circle; within which he dogmatically asserts the whole domain of truth is to be found, while all beyond it is a gloomy waste of error, misconception and falsehood; within, all glows refulgently with the light of science, while all without, is shrouded in the hopeless, rayless darkness of incurable ignorance. Pointing to his dogma, he triumphantly exclaims, this is the Pharos which I have illumed, and which is to guide the unpractised physician through the difficulties and perplexities of the healing art. Language, not less insolent or arrogant, I have heard fall from the lips of an exclusive and inflexible systematist, whose opinions kept Europe in a ferment for nearly twenty years. But doubtless such sentiments are not peculiar to the distinguished individual to whom I refer.

Under the influence of the spirit which being the author of a system invariably inspires, accurate and faithful observation is utterly impossible. Deluded by the idea that he is subserving the interests of science, he will, unconsciously, stretch facts on the bed of Procustes,—distort, elongate or abridge them, as necessity or convenience may suggest, and thus force them to speak the jargon of a sect instead of the language of nature and of truth.—Nor is this all. Adorned with the embroidery of rhetoric, and announced with the confidence of unwavering assurance, the most unsubstantial of learned vanities is soon exalted into the dignity of a postulate no longer open to controversy—is expanded into the comprehensiveness of a general principle the truth of which it would be imprudent audacity to impugn or deny. Thus, what was at first perhaps a paradox, too absurd to merit a serious notice, becomes, in a short time, a dogma—what was the mere shadow of probability, becomes in popular estimation, the real substance of truth; and its infatuated author and zealous partisans, rashly reject, as necessarily sophistical, every argument, that assails its infalibility, and denounce, as false, every fact, that pronounces it to be a fiction.

Theoretically, the evils that have sprung from systematic medicine are numerous enough, but those of a practical character, are many and melancholly. Although it has been preposterously asserted by a teacher of considerable reputation, that principles may

be taught independently of practice, it is self-evident that it is impossible for a medical principle to be popular without controling, within the sphere of its influence, the practice of physic. Assuming this as true for the present, we would ask, how has therapeutics suffered from systematic medicine. Systems have generally consisted of a single exclusive principle and have enjoined a mode of treating diseases quite as peculiar and limited. This must render a few remediate agents popular, while all the rest are considered as either injurious or useless. In other words, all remedies, the action of which cannot be explained in accordance with the systematic assumption, are proscribed. Thus, modes of treatment, which experience has verified, fall into undeserved desuetude and others are substituted, on purely theoretical grounds, which time has not tested nor clinical observation approved.

It has, however, been impliedly declared, as we have already remarked, that systematic exerts but little influence over practical medicine. This position we find assumed in a late address by one who would be thought a Thesaurus of all known to exist—a complete encyclopedia of all that is true and original in medicine. It is alledged by the individual to whom we allude, that it would be the most impertinent arrogance, for an eastern professor to undertake to teach a knowledge of Western maladies, and afterwards, as if ashamed of the absurdity to which he had given utterance, he makes a most grotesque and ridiculous attempt to disguise his sophistry by remarking, "It will be understood, that my reference is not to the teaching of medical *principles*, but medical practice." Than this, the ardent fancy of that venerable theorist never conceived a more groundless absurdity. Did not the chemical systematizers alternately praise the therapeutic virtues of the acids and the alkalies? Did not Cullen's spasm render more popular the use of antispasmodics than they had ever been before the prevalence or since the downfall of that doctrine? Did not Brown's indirect debility cause a greater consumption of active stimulants than ever happened during any other period in the history of the profession? Does not Broussais' gastro-enteric irritation, recommend, to the exclusion of almost every other remediate agent, the use of leeches and the *diete absolue?* Has not Cooke's vena-cavaism made the practice of physic throughout the West and South consist, almost entirely, in the prodigal use of Catharties. These are facts that are utterly indisputable, and yet there is, at least, one individual, who

in despite of the cumulative testimony of almost twenty centuries, ventures to assert, that principles may be taught in one place, and practice in another; or in other words, that there is no necessary connexion between the former and the latter. So far, however, from this allegation having the least shadow of foundation in truth, the whole history of the art of healing, goes directly to establish the fact, that practice has uniformly been moulded, modified and fashioned by systematic medicine. At this, I most heartily rejoice. Were it otherwise, it would constitute the most mortifying and humbling satire, that bitterness could pen, or rancour pronounce against medicine as a science.

The time allotted me, on the present occasion, forbids the idea of examining in succession or in detail, the many systems that have at various periods prevailed, in order to determine with precision the influence which they have respectively exerted over practical medicine. As it is an undeniable fact, that the particular mode of treating diseases which obtained popularity during any specified epoch was the offspring of the system, then in the ascendency, it is a matter of but little importance, which of those, that have awakened much interest, we select for the purpose of illustration. We shall, therefore, make choice of three the most remarkable for their modernity and exclusiveness. We allude to those of Brown, Broussais, and Cooke. The two former engrossed in succession, the attention of Europe, for at least half a century, while the latter has excited but little attention beyond the limits of the country, in which we live.

The relationship and connection which exists between excitement and excitability, and which is undoubtedly one of the most important of the laws of life, that has been successfully applied to the study of Pathology, was discovered, enforced and illustrated by Brown. Possessing, however, too much of the restless ambition of great genius, he was unwilling to confine his deductions within the safe limits of experiment and observation. He preferred boldly to undertake the erection on this basis of a system, which, in the fervor of enthusiasm, he proclaimed to be immutable. The foundation of the Brunonian doctrine was a physiological *duality;* the structure, which rested upon it, was a pathiological *duality*, and as a necessary consequence, the practice which it enjoined was a therapeutical *duality*. The animal economy could exist in two states only It was always found, either strong or weak, which

he denominated, direct or indirect, debility. There was always sthenia or asthenia. According to Brown, therefore, there were but two classes of disease which were sthenic or asthenic. There were but two classes of remedies, and these were stimulants and sedatives. A glance at his classification of diseases will show that he considered, at least four-fifths of them asthenic, and, consequently, active stimulants constituted nearly the whole of his Materia Medica. At this day, few are aware of the extravagant extent to which such remediate agents were pushed by Brown and his disciples, and the disrepute into which debilitants fell under the despotic sway maintained, for several years, by his system. Blood-letting was almost entirely abandoned, and the *deliramentum hæmophobi* raged to such an extent that the lancet was rarely resorted to, even in the most intense imflammations of the respiratory organs, while the most powerful local and diffusible stimulants were given in the most startling quantities. In an English Medical Journal may be seen the case of a young lady, who, after submiting to a dangerous surgical operation, was reduced to a state of great debility. In the brief period of two hours and a half, her physicians, who were Brunonians, gave her 1 drachm of rectified Æther, ½ an ounce of the spirits of Ammonia, the same quantity of the spirits of Nitre, and no less than a pint of Brandy. This is a specimen of the practice of Brown, and, as may well be imagined, so alarming and destructive were its effects, that the intemperate zeal of his warmest partisans was soon moderated, while the more sensible part of the profession, in a few years, abandoned it altogether. No one, is now to be found, who believes in or practices upon the Brunonian system; and it is remembered, only as a proof of the delusion of a strong mind, clouded by hypothesis and warped by prejudice.

About twenty years have elapsed since Broussais, first awakened the medical mind of Europe from the lethargy and indifference into which it had fallen, in consequence of the subversion of the system of Brown. He avowed with confidence and defended with great zeal and ability his belief in the existence of gastro-enteric irritation as the fundamental element in all diseased action. This system was familiarly known, as the *nouvelle doctrine*, or as it was more technically expressed by the author of it, the *Doctrine Physiologique*. To this appellation, however, it had no more claim, than several other systems that previously prevailed, although Broussais considered his as pre-eminently entitled to it.

By Broussais, it was contended, that inflammation constitutes, at least, nine-tenths, of the diseases, that "humanity is heir to," and which are to be cured, rationally, by diet, leeches and gum solution only. These articles, make up the therapeutical tripod of his doctrine. Here we find the duality of Brown reversed—to enfeeble or strengthen, are the indications, and debilitants and tonics, are the remedies. While Brown treated four-fifths of all diseases with stimulants, Broussais treated nine-tenths of them with debilitants, and those too, of such a character, as completely to obliterate Materia Medica from the science.

The results of the system of Brown, in regard to practical medicine, were indisputably unfortunate, but those that sprung from that of Broussais, were most disasterous. During the time it enjoyed a popularity, hitherto unsurpassed, sound experimental therapeutics, was entirely abandoned. Physicians ceased to study and were, consequently ignorant of the action and effects even of those articles of the Materia Medica, confessed by manifold experience, to be useful and important. The hatred of Broussais and his followers, for the class of articles denominated tonics, was deep, envenomed and implacable. Indeed, we may say, without exaggeration, that *toniphobia* never, at any former period, prevailed to so wild and extravagant an extent, as when the *nouvelle doctrine* was blazing in the zenith of unrivalled power, and towering in all the insolent pride of uncontested excellency. Never had pharmacopolists enjoyed so complete a *sinecure*, and never had they so much reason to apprehend the obliteration of Pharmacy from amongst the medical sciences.

The simplicity of the doctrine seduced the inexperienced and unreflecting physician, while the more cautious and reserved were soon subdued into subserviency to its purposes by the fierce and domineering spirit of its author. In a few years it obtained so complete a conquest over France, that the idea of gastro-ententis, that physiological Medusa, haunted every imagination; and those afflicted with disease, were consequently exhausted by uninterrupted losses of blood and the active and unrelaxing enforcement of the *diet absolue.* Blood was drawn in the most startling quantities and the bigoted partisan, neither paused nor hesitated in his headlong career, so long as a single vestage of the phantom remained. At several different periods, blood-letting has been popular and physicians were then rather too unsparring of the vital fluid, but under the

enchantment of no spell, have they been emboldened to shed it with so wasteful a prodigality, as during the reign of Broussais' doctrine. Of the truth of this assertion, I doubt not, you will be satisfied, when you learn that a German physician, who took much pains to inform himself on the subject, states that in an ordinary year, two hundred and fifty-seven thousand pounds of human blood, were consumed in France, by leeches alone.

In contemplating the period in which Broussais flourished, we cannot but be painfully struck at the blind infatuation, that seems to have taken complete possession of the medical mind of France. The fanatical enthusiasm of the student, in favor of the physiological doctrine, was not more remarkable, than the tame and unresisting subserviency of the physician. All, as if so many atomata, moved by a single hand, united in the propagation and enforcement of its decrees. Intoxicated and delirious with the wild and feverish excitement, both pupils and preceptors, considered the simple word of the physician of Val de Grace, as their supreme law, from which no one dared, even in fancy, to appeal. Wholly ignorant, as the younger part of the profession necessarily were, of the modes of treatment which experience had tried and approved, they imagined they saw in the word *Sangsue* or *Leech*, a complete treatise on the Materia Medica, and in the jubilee of their feelings they exclaimed *ne plus ultra.* To his disciples, Broussais imparted an energy and enterprise, that prompted them to the most unwearied industry—he inspired them with a blind zeal, that caused them, not only to spurn the most formidable difficulties, but which fortified them against the fiercest assaults of reason. Under such auspices, it was impossible to prevent the extensive diffusion of his doctrine. Indeed, at one time, so rapid was its progress, and resistless the sway it seemed destined to exert, that the doctrine of irritation looked forward with confidence, to a complete conquest of the medical world. What a change, however, has a few brief years produced in the prospects of a system, that once shed so brilliant and bewildering a light? The author of it, on whose words, the listening multitude, hung in rapture—whose wards were crowded to overflowing—having been overthrown and defeated, spoke in 1835, to a few shrinking and wavering disciples, and wandered through the ample wards of Val de Grace, almost solitary and alone, soured and embittered because of the disaster, which had befallen him.—Still, however, amidst the gloom and despondency, by which his

hopes had been darkened, he continued obstinately to maintain with an effrontery, as insolent as it was ridiculous, that the age was not sufficiently enlightened to appreciate the value of his opinions.

To see a man, whose wisdom had been a theme of general and enthusiastic praise—whose labors had excited an admiration almost universal, go down to the grave neglected and deserted, if not despised and oppressed, on account of the unamiableness and vindictiveness of his temper, is indeed mortifying to the pride of human ambition. But it is just—it is as it should be. Time, experience and reason have performed their office. They have decided that disease does not consist in a mere exaggeration of vitality—that gastro-enteritis is not the true key to sound pathology—that the morbid symptoms are not merely the physiological sympathies in excess—that one and the same cause cannot produce entirely different diseases—that there is often a very wide difference between the violence of the febrile phenomena and the extent of the organic lesions—that there are specific forms of inflammation, that require special modes of treatment—that the excessive depletion recommended by Broussais so enfeebles the bodily powers, as to retard the access of crises, to prevent eruptions from taking place—to render convalescence tedious and interminable—to multiply the frequency and increase the danger of relapses, and that finally, in view of all these facts that the enlightened practitioner, is no longer to be deluded and led astray by his *ignis fatuus inflamationis.*

(TO BE CONTINUED.)

SOME OF THE ADVANTAGES OF ENDERMIC MEDICATION.

BY THOMAS D. MITCHELL, M. D.
Professor of Materia Medica and Therapeutics in Transylvania University.

The hints about to be thrown out at this time, are intended for practical men; and, as a matter of course, will not be tinctured a great deal with mere speculation. I am in the habit of teaching the great value of facts, irrespective of theory, well assured that one well ascertained fact in medicine, is vastly more important

than three-fourths of the theories that have prevailed in the world of physic.

Not to waste time with a lengthened exordium, I proceed at once to notice the practical advantages of *Endermic Medication.* And as preliminary to this end, let it be understood, that by this term we mean the application of remedial agents, beneath the cuticle, either by the previous action of a vesicant, by means of a common thumb lancet, a seton, or any similar and suitable contrivance. The object in view, is to place the remedy under such circumstances, as to render its absorption easy and natural, and at the same time to facilitate its operation by nervous agency. To illustrate: suppose we desired to affect the stomach by means of an application to the epigastric region, and ultimately to impress the whole system. We might perhaps do so by mere friction to the part, according to an ancient practice, but with much less efficiency and promptitude, than by the endermic mode. We might rub into the pit of the stomach, a portion of laudanum, or a solution of a salt of morphia, or an opiate ointment, and after a somewhat tedious process, success might be attained. But if a blister plaster no larger than a silver dollar be laid on the spot, and after having acted for the space of five hours, be succeeded by a soft bread and milk poultice, we so detach the skin, as to be able to remove it entirely, from the blistered spot. Then we have a most efficient surface for our purpose, and we can feel confident that our remedy will go at once into the system, either by the circulatory or nervous apparatus, or by both, and thus accomplish what we desire, with great promptitude and vigor. True, there is a delay here, in denuding the surface; but once denuded, we can make twenty successful applications, if need be, in so many hours, by the same inlet to the system, and as various in their kind, as the exigencies of the patient may require.

The high value of this mode of medicinal administration is obvious, in all cases of great irritability of the stomach, or any part of the alimentary canal, that would forbid the internal use of remedies. It is also important in some painful chronic affections, in which our anodynes, given by the mouth or per anum, have almost ceased to perform their wonted office, as in schirrus of the uterus, cancerous affections, and the like. And it is also valuable, in many local pains, which it can certainly mitigate, in a much shorter period, than is usually assigned to their relief.

I have spoken of great irritability of the stomach, as among the cases to which endermic medication is suited, and mention might also have been made, of imaginary irritability of that organ, which is often urged as the basis of refusal to take certain medicines. A case, in point, for each of these varieties will be given, as illustrative of the practice.

In 1833, a delicate female under my care, suffered much from gastric irritability. All the ordinary means in use for quieting this unpleasant symptom failed. The patient was greatly reduced by previous febrile disease, and at length, neither medicine, nor nourishment could be received. The action of blisters was temporarily useful, but did not reach the case. At length, it was determined to try the new plan of endermic medication; and to this end a fly blister of the size of a dollar, was placed on the epigastrium, and at the end of five hours removed, to give place to a small poultice of bread and milk. The cuticle thus detached, was taken off, and a half grain of acetate of morphia, sprinkled on a small plaster of cerate, was applied to the vesicated surface. In a half hour or less, the patient fell asleep, and enjoyed several hours of sweet repose; and her stomach was so much relieved, that it could receive suitable nutriment and retain it. At the end of eight hours, another dose of the salt of morphia, was applied with similar result, and the patient was thus placed beyond the reach of danger.

In the year 1829, I was called to see a gentleman who had passed the meridian of life, but whose system was of the irritable kind, and made more so, by his morbid imagination, touching the frightful operation of remedies. He could not take the sulphate of quinine, as he supposed, because he felt sure it would kill him. He had suffered severe delirious attacks, in his febrile paroxysms, much to the alarm of his friends, who feared, that in one of these, he would certainly die. It appeared to be impossible, to get the bark or any of its preparations into his system, either by the mouth or rectum, and yet his case demanded the use of some medicine of this kind. Determined to carry out my views, I availed myself of a large blistered surface, that had just been constituted, as a relief to the distressing irritability of the stomach, under which he labored, occasionally. For this purpose, an ounce of simple cerate was incorporated with twenty grains of the sulphate of quinine, so that the mass was unchanged in its appearance. The entire cuticle having been adroitly forced from the blistered part, [the epigastri-

um] the whole ounce of cerate, spread on a cloth just as large as the blister, was applied. As is usual, this occasioned some unpleasant twinges, which, however, soon subsided. Suffice it to say, that the periodicity of the disease, was thus broken up, and there was no return of chill.

A practice of this kind, has for several years, been in use in some of the European hospitals, in the treatment of all obviously intermittent diseases, especially the common ague and fever. It merits the attention of American practitioners, and should never be lost sight of.

It is stated in the work of a distinguished modern writer, as if it were a novelty, that blisters *on the sternum*, are highly efficacious, sometimes, in relieving certain diseases of the head and brain. I notice this piece of information, partly to say, that the late Professor Rush, was in the habit of thus employing blisters, very frequently, in such cases; and also, to remark, that a half grain of acetate of morphia, applied to a very small denuded surface, high up on the sternum, will often relieve a headache, which will not yield to a blister laid on the nape of the neck.

Before dismissing this part of our subject, I will give a brief history of the use of sulphate of quinine in another case, and respectfully ask attention to it.

In the winter of 1839–40, I was called in consultation, to see a young gentleman, who had been confined for many months, with what was called "*a fever of the Typhoid kind;*" a designation whose true import is about as well understood by patients, as by many of the profession who very confidently and significantly employ it. I found the patient in his bed, unable to sit up, with small weak pulse, white tongue, with the margin assuming a healthy aspect, stools of a natural appearance or nearly so, skin moist, and no complaint of pain, but a good deal of debility. I inquired if the man had taken or used in any way, any sort of tonic medicine, to which a negative response was given, and the reason assigned was 'that his system did not seem to be ready for it.' He was taking a blue pill night and morning, and that was about the whole of the treatment.

At my suggestion, (learning that he did not rest very well,) a pair of blisters, was laid on the wrists, each of the size of five by two and a half inches. A soft poultice was directed to be laid on at the expiration of five hours, in order to detach the cuticle, and

after this to dress the surface with a strong cerate of sulphate of quinine, and to repeat this dressing every four hours. And as I did not wish to interfere wholly with the previous treatment, a blue pill, was directed to be given at bed time. The patient was also directed to take arrow root, gruel, boiled rice, &c. &c.

I have only to add, that the event fully proved, not only that the *time had come* for the use of tonics, but that they could have been as judiciously employed, several weeks earlier. The patient rapidly recovered under this treatment.

Let it be borne in mind, by all who are in the habit of waiting for weeks, to find the *right time*, for giving tonics, in low fevers, that the sulphate of quinine may be safely administered, endermically, when it could not be otherwise employed. If any choose to doubt this statement, because they cannot account for it, they are quite welcome to their scepticism, though I cannot but think, their patients will be the losers by their philosophy, falsely so called. As I am just now engaged with facts, it would be unseemly, in my judgment, to impair their force by incumbrance with explanations and reasonings, which, however satisfactory to my mind, might very possibly, excite a smile in others.

But there are other modes of endermic medication, that are highly valuable to the practitioner, and to which I call the especial attention of the younger members of the profession.

Within a few years past the salts of morphia, and some other articles have been employed remedially, by *inoculation*. This is certainly one of the neatest, most delicate and most efficient modes of administration, with which I am acquainted. Let a few instances suffice.

A female suffered very severely from a common headache, probably of the kind called nervous. Various expedients were resorted to, again and again, but the disease seemed to get well, only by wearing itself out, as the patient expressed herself. At length, it was resolved to inoculate her on the temporal region of the side of the head most affected. A half grain of acetate of morphia, was rubbed up with a drop or two of water, to form a solution of the same consistency of ordinary vaccine virus, and this was introduced by means of a sharp lancet, precisely as we operate for vaccination. In less than a half hour, the head was relieved, the whole system tranquilised and the patient fell into a comfortable sleep.

Sometimes the pain of headache, especially in studious persons, is located over the right or left eye, in a point, that may be com-

pletely covered with the end of a finger. Let the solution of the morphia salt, be inoculated directly on this spot, and it will frequently relieve the patient completely, in a very short time.

Let me not be understood, here or elsewhere, as the advocate of local panaceas for constitutional diseases. I despise the very thought, and teach its opposite, with all the energy I can muster. I am aware that in hundreds of cases, constitutional treatment alone, will suffice. Yet there are some patients, to whom the endermic method, as above stated, is highly important, after the employment of remedies for constitutional derangement.

Another instance may be fitly introduced, of the inoculation of acetate of morphia, to show the value of the practice. About a year since, I advised this plan in the case of a lady, long affected with severe pains and spasms of the inferior extremities. She had been employing anodynes internally so long, that they seemed to lose their influence, and also derange her digestive organs. A thick solution of the acetate of morphia was inserted under the cuticle, by means of a sharp pointed lancet, in some ten or a dozen spots in the course of the limb. The expedient was attended with highly gratifying success.

It will be obvious to the most cursory observer, that this practice is admirably suited to the cases of those, who from any cause cannot be prevailed upon to swallow a medicine; or whose stomachs either reject the article at once, or are seriously impaired by its local action on that organ. For all such persons, we have a most happy substitute, in the endermic mode, by inoculation.

There is another plan of introducing energetic remedies into the system, essentially endermic in its nature, that has proved to be highly valuable. I have reference to those dreadfully and almost hopelessly painful diseases of the uterus, that partake of the nature of schirrus or cancer, or both. Every one practically familiar with such cases, is aware, that quantities of opium, almost incredible, are taken daily by the unhappy victims of these maladies, till at length appetite is destroyed, or so weakened, that life becomes almost intolerable. It was for such patients, that the device was resorted to in Europe, not long since, of charging a seton with a very strong cerate of acetate of morphia, and passing it through the skin and cellular substance, somewhere about the os sacrum, at a point most contiguous to the uterine organs. We are told that the mitigation of pain was more prompt and certain, in this way, than by the old

mode of anodyne treatment, while, at the same time, the stomach regained, in a good degree, its wonted energy. The quantity of the salt of morphia, thus introduced into the system, must of necessity be regulated by the previous habits of the patient in the use of opiates.

I have never employed the salts of morphia by inoculation, or in any form of endermic medication, in *Tic dolereux*, *Tetanus*, or *Delirium Tremens*. But I cannot doubt, that in each of these very different affections, the use of so potent a remedy, either to a denuded spot, or by the point of a lancet, would be followed by very desirable consequences. In the first, the solution of the salt of morphia should be passed under the cuticle, precisely at the painful spot, in several distinct places. In the other diseases named, I would suggest the application of the remedy in this way, along the course of the spine, and also to a spot denuded by blisters, high on the nape of the neck.

In short, it would seem, that in almost all cases where the smallest objection exists to the internal use of opiates, we may safely and successfully resort to the endermic plan, in one of the modes, briefly detailed in this paper. And while, I am well aware, that I am not teaching any thing new, as respects many of the profession, yet I also know, that this plan of medication is not fully appreciated, and hence that its use is altogether too limited.

CASE OF ACUTE TUBERCULAR DISEASE.

BY LEONIDAS M. LAWSON, M. D.
Of Cincinnati, Ohio.

The subject of this report, a negro boy, aged 18 years, complained of slight indisposition for three weeks previous to the accession of acute symptoms. I was called to see him about the first of June, 1838, at which time the only appreciable evidence of disease was an acute lancinating pain in the epigastric region.—The pulse was natural, tongue clean, appetite medium, ingesta caused no uneasiness, alvine evacuations healthy. Upon firm pressure being made about the centre of the epigastric region, slight pain was produced, but no evidence of gastritis could be de-

duced from the symptoms. The boy stated that he was actually being devoured with worms, that he could feel them move, and that their presence was the cause of pain. A sensation of tightness, drawing across the bowels, of the motion of a living object, and the discharge of lumbrici, with other symptoms, led to the belief that the disease might be worms—possibly tænia.

In view of all the contingencies of the case, and influenced by the most prominent symptoms, anthelmintics were prescribed. The administration of this class of remedies, aided by active cathartics, dislodged perhaps twenty lumbrici. The patient was directed to examine his alvine evacuations, for gourd-seed like substances, and having did so, declared, that he saw half a dozen bodies of that description, but his intelligence was not such as to entitle his assertion to much confidence. After the expulsion of the lumbrici already mentioned, no worms could be dislodged.

Active cathartics of calomel and colocynth were used, which operating freely in connection with vesicatories, would relieve the pain. Blistering, cathartics and mucilaginous drinks were continued and under this treatment the patient so far recovered, as to request to be put to work. This mitigation of the disease, however, was of short duration, as the pain speedily returned. The sensation was still lancinating, but not continuous, and observed irregular intermissions. Great embarrassment still existed in deciding what tissue was the seat of pain.

After the continuance of the case for two weeks, pectoral symptoms supervened; and about the same time, the pain in the epigastric region subsided. Pain in the chest wandering, sputa limpid, tenacious and mixed with a little blood, gradually assuming the appearance of pus, and returning again in a few days to its original character. With the accession of pectoral symptoms fever and dyspnœa came on, which taken in connection with the physical signs, manifested the existence of pneumonia. Fever, pain in the chest, dyspnœa, slight tumefaction, considerable pain on pressure in the right hypochondrium and slight tenderness over the abdomen were concomitant symptoms.

These symptoms were combatted with general and local bleeding, emetics, nauseants with ant. tart. and ipecac, counter irritation, aperients, demulcents, &c. But in defiance of all remedies, the disease steadily advanced, respiration becoming more and

more difficult, until an apparently asphyxiated condition terminated the struggle. The duration of the case was about six weeks.

Post Mortem Examination.—A few hours after death, the body was examined by Drs. Sharpe, Duke and myself, but the circumstances were so unfavorable, that a minute dissection was impracticable.

Exterior: great emaciation, no anasarca.

Abdomen: liver much enlarged, vascular and of a matted appearance. The gall-bladder presented nothing peculiar, except that the bile was thinner and of a lighter color than natural. Stomach healthy, except a little inflammation and thickening of the mucous membrane about the pyloric orifice. Small bowels throughout were inflamed in all their tunics and the valvulae conniventes were unusually prominent. Large bowels healthy. Mesentery very vascular and highly inflamed, all the mesenteric glands were enlarged and generally hard, a few were softened. Pancreas *totally disorganized*, its structure so completely broken up, that the organ could not have been recognized out of its natural location; adhesions to the stomach and surrounding tissues very firm and extensive. Spleen a little enlarged and contained a few incipient tubercles. Kidneys healthy.

Thorax: The pleura was nearly healthy, no adhesions. Lungs extensively diseased, parenchyma completely engorged with blood and infiltrated with serum; they crepitated but little and filled completely the cavity of the chest. Near the root of the lungs were numerous deposites, apparently calcareous, of a granulated texture, agglutinated together and surrounded by a firm membrane. The entire substance of the lungs was changed to a granular texture, presenting, according to the remarks of some present, somewhat the appearance of the roe of fish. These granules were of an intermediate size between that of millet and hemp seed and were doubtless what has been denominated *Miliary Tubercules.*

Heart and percardium healthy.

Upon a review of all the facts connected with this interesting case I am of opinion, that it should be regarded as essentially scrofulous.

As a result of the researches of modern pathologists, scrofula has been reduced from an occult and a mysterious nonentity, to a tangible form of disease. This desirable object has been attained by accurate investigation touching the pathology and physiology of

of the lymphatic system and white tissues. I conceive it to be established by reasoning *a priori* and by direct experiment, that the lymphatic system possesses a much higher state of vital action, than that of being merely conduits for conveying off the debris of the animal system. That the lymph is not old and effete matter seems to be established by numerous facts, not the least of which is, its close resemblance in its general and specific qualities to red blood. According to this doctrine, the lymphatics convey a highly animalized chylifacient fluid, and their office is to add to and not to decompose the organs of the body.

Scrofula is a disease of the lymphatics. That condition which has been denominated the scrofulous diathesis, is not a material virus lurking in the system and often propagated from parent to child, but is merely a plus of white tissues forming a constitutional defect which is liable, under certain circumstances, to take on that form of disease termed scrofula. Dr. Stokes, in a most able and lucid exposition of the subject, has shown that this superabundance of white tissues may be congenital, as a result of *arrest of developement;* or it may be acquired. In either case, whether the scrofulous diathesis be congenital or acquired subsequent to birth, the white tissues being in excess, irritation and inflammation may be set up in those structures and scrofula developed.

The lymphatics enter into the composition of nearly all organized portions of the body, and when they acquire an undue ascendency over the red tissues, and from any cause become irritated and inflamed the result may be phthisis pulmonalis, cancer, ulceration of the cartilages, &c., or the impression of the morbific agent may be more powerful by acting in conjunction with an enfeebled constitution, and the disease involving organs so directly concerned in the function of nutrition, there may follow the most rapid and fatal structural injury.

In the case before us, the presumption of a scrofulous diathesis is based upon the fact of tuberculous deposition, mesenteric glandular disease; the family to which the boy belonged having lost several members by scrofulous or tubercular disease, &c.

The vital action of the white tissues is comparatively weak, hence, in the present case, the disease of the pancreas passed rapidly into disorganization without superinducing much febrile reaction, which could scarcely have been the case in ordinary inflammation. In the lungs, it is true, there were symptoms of ordinary

inflammation, yet, tuberculous deposition was superadded, which is not the result of common pneumonia. The lymphatic glands of the neck did not swell, which was only an evidence of the disease attacking internal vital organs instead of those more external and less important.

This disease is that which has often been denominated Cachexia Africana or Negro Consumption. This term is objectionable. It conveys the idea, that it is a form of disease peculiar to the African race, where as it doubtless occasionally occurs in the whiteman. That the African, is measurably exempt from some and peculiarly liable to other forms of disease common to the whiteman, is certainly true; and that he is more frequently the subject of this acute form of consumption observation fully establishes. While, however, he is often suddenly destroyed by acute consumption, he enjoys a comparative immunity from the more dreadfully protracted phthisis which attacks the whiteman.

Whether the pathological conditions existing in the above instance are such as uniformly occur in that disease, I am unable to say; but the probability is, that the leading features are the same modified of course by incidental circumstances.

In reference to the cause of this form of tubercular disease, among Africans in this country, may it not depend upon their change of habit and climate—especially the former?

Comparative pathological anatomy affords some facts, which strengthen this supposition. It is a well known fact, that wild animals, when domesticated, often have tubercles rapidly developed in them. It is a very common occurrence in menageries, and even domestic animals, that have been brought in more close connection with man, as in large cities, are also known to be subject to tubercular disease.

The African portion of the American population, were originally in a state of the most deplorable barbarism, being elevated but little above their compatriot monkies. But upon arriving in this country, their habits and mode of living are entirely changed, and they become, as the wild animal, when domesticated. The changes consequent upon this domestication may have so modified the vital powers, as to render an incursion of acute tubercular disease, when exposed to the exciting causes, of common occurrence.

NOTE ON THE USE OF CATHARTICS IN THE TREATMENT OF BILIOUS FEVER.

BY THE EDITOR.

So far as my observation has extended, the liver is an organ that uniformly suffers in Bilious Fever. I have seen much of this form of fever, and in every instance that I have witnessed, that organ has appeared to be in an abnormal state, to a greater or less extent, as was manifested by a diminished, suspended or vitiated biliary secretion. Not only is it obviously in a morbid condition, but it appears to be so, in the generality of cases, to a greater extent than any other disturbed organ. Although it is important to attend to other indications, it is imperiously necessary that the liver should receive earnest attention early in the disease.

Gastro-enteritis is a common lesion, not only in this, but in all other forms of febrile affection at some period of their course. It is not true, however, as has been alledged, that this pathological change exists, from the onset, in all cases. We do not, therefore, subscribe to the opinion of those who believe that all febrile action is always dependent on local irritation and inflammation. We believe in the existence of *Idiopathic Fever*, or, in other words, in fever that is wholly independent, in the commencement, of any of the certain and acknowledged effects of inflammation. Nor are we led to this from theoretical considerations—it is purely on the grounds of experience and observation. Moreover, numerous physicians have described certain states which have been denominated fever, that are clearly distinguishable by their symptoms, history and post mortem appearances, from any of those morbid conditions that are believed to arise from inflammation. Without entering, at this time, into a consideration of the diagnostic symptoms of Idiopathic Fever, we would make the general remark, that for several days after the onset of very many cases of fever, there are no indications of inflammation, and that when these do occur, it is after the lapse of a sufficiently long period to prove that they arise from a lesion that has supervened upon the original disease, and which is secondary in its character.

The results of dissection afford the most conclusive proof that fever may exist, and even prove fatal, independently of irritation and inflammation. Many cases of fever have terminated in death,

and yet no one of the acknowledged effects of inflammation could be discovered on dissection. Nor is this all. We occasionally fail to find, after fatal fever, any appearances which are incontestibly morbid in their character. Indeed, it frequently happens, that only such appearances are seen as are almost uniformly observed in cases of sudden and violent death, and which are, consequently, unconnected with the causes of febrile action.

The morbid appearances, moreover, after fatal fever, present no uniformity of character. Even in cases that are marked by nearly the same leading symptoms they are very various. Nor do they bear any uniform proportion to the violence of the symptoms evinced by the organ or apparatus in which they are found. Frequently it happens that the symptoms are very intense, while the morbid appearances are limited in extent or wholly absent, and *vice versa.*

Although we cannot regard inflammation as uniformly the cause of general febrile action, it must be admitted that it is very commonly the consequence of it. This is proved by the period of fever at which the indications of inflammation commonly make their appearance, and the character of the lesions that are frequently discovered after death.

This is an important pathological fact, that should never be forgotten by the physician who has to treat the fevers of the west and south. Generally, there is a brief period at the commencement of Bilious Fever, during which, the symptoms do not unequivocally indicate the existence of inflammation of any portion of the gastro-intestinal mucous membrane. This is the period which should be embraced for the active enforcement of cathartic medicines, and particularly of calomel. If proper advantage be taken of this period—if calomel, with other cathartic adjuvants, be boldly but judiciously administered, the disordered condition of the liver will be removed and we shall have no gastro-enteritis. The reason of this is obvious. In Bilious Fever the blood moves through the vena portarum sluggishly—the veins which go to form that large vessel, come from the stomach, bowels and spleen, and consequently, they must be in a rather overloaded condition. This will inevitably cause, if permitted to continue, congestion of the gastro-enteric mucous membrane. When this morbid condition takes place, it will, if not promptly remedied, very speedily pass into actual inflammation. Now, if the medicines to which we have referred be

properly used, before this event happens, the healthy action of the liver will be restored—the blood will circulate through that organ with its accustomed velocity—the veins which come from the stomach and bowels will be freed from their state of undue distention, and the danger from congestion and inflammation of the gastro-intestinal mucous membrane will be averted.

But this is not regarded by certain individuals as the only period during which the cathartic treatment of Bilious Fever can be prosecuted with advantage or success. Without the slightest reference to the changes which are constantly taking place in fever, they persevere in the use of those that are decidedly drastic from the commencement of the disease, through all its stages, until it terminates in death or in a restoration of health. Unfortunately, the former is a rather frequent and uncommendable result. This is experience and not prejudice, as a little reflection will satisfy the reader. If the judicious enforcement of cathartics has not been able to open the liver, to relieve the congestion of the gastro-intestinal vessels, and, consequently, to prevent the occurrence of inflammation of the lining membrane of the alimentary canal, will not the irritation which inevitably results from a perseverance in drastics certainly exasperate that inflammation, and exclude all rational hope of ultimate recovery? This conclusion is irresistible, and has received full verification in the practice of hundreds of physicians. The practice, therefore, should be abandoned, not only as inefficient under the circumstances, but as almost certainly destructive.

Not only are cathartics injurious after the supervention of gastro-intestinal inflammation by aggravating that lesion, but they precipitate cerebral disturbance in consequence of the close sympathetic connexion that exists between the alimentary canal and the brain. The production, or exasperation of cerebral symptoms when they already existed, I have often foretold, when I could not dissuade, after the occurrence of gastro-intestinal inflammation, from a further perseverance in cathartics. When the gastro-intestinal surface has become, in the course of fever, either congested or inflamed, the attention of the physician should be particularly directed to two points:—*first*, to the character of the impression that will be made, on the portions of the gastro-intestinal mucous membrane that are diseased, by the medicines administered; and *second-*

ly, to the sympathetic effects which will be produced in other parts of the system by that impression.

Now, in regard to the first point, it should be recollected that the mucous membranes, in general, when they are congested or inflamed are remarkably liable to become the seat of ulceration. This is particularly the case when the diseased parts of those membranes are exposed to the action of local mechanical irritants, and when the system is, at the same time, labouring under general febrile action. When in protracted fevers there is a retention of urine, and a congested state of the lining membrane of the bladder, as frequently happens under such circumstances, the physician cannot be too circumspect in regard to the use of the catheter. If the introduction of that instrument should be necessary, and it is permitted to remain any considerable length of time in the bladder, the most disasterous consequences may be anticipated. The contact of the end of it with the congested mucous membrane of that organ, will often cause, in the short space of twenty-four hours, ulceration and sometimes even perforation of the bladder. Cases of this kind have been recorded by Dupuytren and Barbier. Illustrations of the tendency to ulceration, on the exterior of the body, in the course of fever, are familiar to every practitioner. Now when we reflect on the character and mode of action of several of the cathartics in general use in the treatment of the fevers of the west and south, we must be convinced that an incalculable amount of injury must result from their indiscriminate employment. This is the case in regard to Aloes particularly. They are slow in their action—pass very tardily through the bowels—are difficult of solution out of the body and still more so in it, in consequence of which, they are obliged to remain several hours, and sometimes days, in contact with a membrane often either congested or inflamed. Acting, under such circumstances, as a mechanical irritant, the result cannot be otherwise than unfortunate. The form also, under which Aloes are generally given, frequently renders them more injurious than they otherwise would be—this is that of pill, and the difficulty usually encountered in dissolving them is much increased when they are permitted to remain in that form days and even weeks sometimes, before they are administered. Then the article becomes so indurated as frequently to resist the solvent powers of the intestinal tube and to pass from the body wholly unchanged. This I have seen happen, in exhausted states

of the system from fever, several days after aloetic pills had been administered. The results, therefore, of their retention in the bowels under circumstances of congestion or inflammation of the intestinal mucous membrane must be exclusively prejudicial.

The condition of the circulation through the abdominal organs during the existence of fever, if that condition is not speedily subperseded by a better, almost certainly exposes the gastro-intestinal mucous membrane to congestion or inflammation. This the reflecting physician will soothe and not exasperate, for the stomach and bowels when in a state of irritation become centres of sympathetic action. Whatever increases that irritation not only aggravates their condition, but seems to offend the whole economy. The impressions made upon them are felt by the brain and every other organ that is morbidly excitable in febrile affections. A recognition of this principle has introduced most important modications into the treatment of fever, but it seems to have been wholly disregarded by those who administer drastic cathartics through every stage of the disease.

NOTE ON THE PROGNOSIS OF SCARLATINA.

BY THE EDITOR.

Scarlatina has been rather prevalent in this neighbourhood during the last several weeks, and it has exhibited a feature of much importance in a greater number of cases than it has heretofore. Though we have seen little of the disease, most of the cases having occurred in the country, we have been informed by several physicians that it frequently commences with vomiting and purging, and when this is the case it terminates uniformly in death, and that very speedily. In several instances this event happened in from twelve to thirty-six hours from the commencement of the complaint. One case that fell under our observation terminated fatally in twenty-four hours.

In the Spring of 1839, we saw several instances in which Scarlatina commenced with vomiting and liquid purging, and from that time we have looked upon such cases as almost necessarily fatal, at least, we have seen or heard not of any recovery under such circumstances. It must, therefore, be regarded as of very evil omen, and the physician should be on the alert whenever it occurs, in order, if possible, to counteract its fatal tendency, although we confess we are not prepared to make a single practical suggestion on the subject.

REVIEWS.

De l'influence des climates sur la production et le traitment des affections tuberculeuses. Par Ch. Dujat, M. D.

The influence of Climates on the Production and Treatment of Tuberculous affections. By Ch. Dujat, M. D.

Within a very few years, a most remarkable progress has been made in the study of tuberculous affections. Their pathology and diagnosis have reached, since the time of Lænnec, a degree of precision which was not previously hoped for or expected. Diseases that are entirely distinct from those strictly tuberculous, are no longer by the enlightened pathologist, confounded with them, nor are patients annoyed or distressed by that useless ferrago of remedies, with which the therapia of almost every physician, was formerly crowded. After the disease is confirmed, we do not, I admit, treat it with more success than did the older physicians, but by a better acquaintance with the causes and nature of tubercles, we have been able to lay down a more rational and successful method of prevention. The etiology of phthisis is not still sufficiently understood—there is much to be done and we are gratified to see that much is doing. When we shall have ascertained the precise nature of the circumstances most favorable to the development of tubercles, we may then expect that its prevention, at least, will be brought more completely under the dominion of the healing art. We are not so sanguine, as to believe that confirmed phthisis will ever be cured by professional agency, but we do believe, (indeed we already possess many means that already go far towards its prevention,) that we shall be able with certainty to prevent it. From what we know of its nature, this is all that can be rationally expected. With the view of throwing more light on the causes of phthisis, Dr. Dujat has studied with special care the influence of climates on its production. He sets out with expressing the opinion, that the real influence of climate in the production of phthisis

pulmonalis is only to be determined by studying the influence of those that are entirely different from our own. Between the climates of the south of England, France and of Italy, the difference is too inconsiderable to influence, in any remarkable degree, that condition of the economy that gives rise to the deposition of tuberculous matter.

In the memoir, the title of which heads this article, Dr. Dujat undertakes to prove by the observations of others, as well as his own; 1st. That phthisis is very common amongst the natives of hot countries; 2d. That emigration into those climates has a favourable influence on those who have already contracted this disease in temperate regions; 3d. That a long residence in low latitudes may produce it in Europeans; 4th. That the negroes are not more predisposed to it than the *creoles*.

With Dr. Clark he is of opinion that tuberculous cachexy is not a predisposition to the disease, but that it is already the first stage of it. In this stage, and this only, is it susceptible of cure, for once the presence of tubercles is detected in the lungs, nothing more can be done than to palliate the symptoms and, for an uncertain length of time, to protract life. The alteration they produce in the lungs gives rise to general cachexy, and that determines the result.

One of the reasons why we have been induced to believe that phthisis is a rare disease in very hot climates, consists in the fact, that the fevers and other severe acute affections which are very prevalent there, and which carry off a majority of unacclimated strangers, mask the progress of phthisis and deprive it of its victims. Between the tropics and in unhealthy climates, in despite of what has been said to the contrary, it is a very common disease. The author, informs us, that he saw as many cases of phthisis in the hospital of Rio Janeiro as in those of Paris, and I am satisfied that during my residence in the South, I witnessed as many cases as I have, in the same length of time, in Kentucky. Besides, in their origin there is more analogy between the affections of the liver and intestines, which are so common in hot latitudes, and tuberculous diseases than is generally supposed. To this subject, on some future occasion, we may return. In regard to the island of Madeira it is said: "Though the climate of that island may be very beneficial to the consumptive of other countries, there is no disease more frequent than phthisis amongst the native inhabitants." By M. Louis

we are informed that he has seen entire wards of phthisical patients in the hospitals of Naples.

It is useless, therefore, to seek a climate for our tuberculous patients where phthisis does not exist, for one of that character seems, at present, a *terra incognita.* The author is of opinion that we had better, as did a member of the Royal Academy of Medicine, ask what becomes of those phthisical persons who are transported from one climate into another? The answer to this enquiry is unembarrassed by difficulties. They find a grave in a strange land, and the sufferings of their last days are unmitigated by the affection of relatives or the sympathy of friends.

The causes that predispose to consumption are essentially debilitating in their character, and it is wonderful that when this fact is so fully established by the most conclusive proof, so little attention has been paid to it in the treatment of that disease, by the great majority of practioners. But few of these can be enumerated in this article. Amongst the most conspicuous and the most operative, is, perhaps, humidity. In very high northern latitudes, fewer cases of phthisis are found than either in temperate or low southern climates. Indeed, many facts exist, going to show that extreme cold has a tendency to prevent the formation and to retard the progress of tubercles; and if cold is preventive or palliative, it is because there is less of humidity associated with it than where the temperature is higher.

In tropical regions the causes of phthisis are the same as in temperate climates. There is in the former less cold, and the air is not so frequently renewed as it is in the latter, but there is more moisture and an intenser and a more incessantly enfeebling heat. The food is not so invigorating, particularly that on which the poorer classes almost exclusively live, consisting mostly of vegetables and salted meats. Such diet is enfeebling and that which produces debility, will, in any country, predispose to the developement of tubercles. This is proved by the mortality from tubercles in a religious association of women, to whom Lænnec refers, whose diet was austere, but as it illustrates also the deleterious influence of the depressing passions we shall not give it in detail in this place. The prevalency of phthisis and other forms of scrofula amongst the badly fed part of the population of large cities shews the force of diet in producing tubercles. "It is certain, from the experiments of Dr. Jenner, that we can, by unsuitable food, soon call up a

tuberculous disease in rabbits; and it is equally well known, that a wet season and bad pasture will bring into existence the same disease, to a much greater extent, in sheep and other animals." It is well known that cows in large towns fed upon food to which they are not accustomed become tuberculous. This is particularly the case with those in Paris; and they would soon fall victims to the disease, were they not, in the commencement of it, sold to the butchers. Wild animals when domesticated or confined in situations to which they are not accustomed, and consequently fed on articles to which they were not used before being reduced to a state of subjection, very commonly die of consumption.—Nearly all the monkies in the menageries of Europe die tuberculous. Furthermore, the prejudicial influence of insufficient or of an enfeebling diet is evinced by the fact that herbivorous animals contract frequently and with great facility, tuberculous affections, while it is rare to meet with them and difficult to produce them in the carnivorous. Since, therefore, the food, which is mostly vegetable, in hot climates, is far from invigorating, there is no reason why they should be exempt from phthisis pulmonalis and other forms of tubercular affection.

Here I cannot refrain from remarking that I am satisfied much injury is done by the strict diet to which patients laboring under chronic affections are often subjected. This is particularly the case in regard to secondary syphilis and dyspepsia. We heard much more formerly than at present of syphilitic and dyspeptic phthisis. Many cases thus denominated, that have fallen under our observation, evidently resulted from the rigid and protracted enforcement of a system of diet, that had no other effect than to weaken and favour the developement of tubercles. No course of conduct can be more reprehensible, than to subject those hereditarily predisposed to consumption, to low diet for weeks and months in succession. Great risk is thus run of promoting the developement of tubercles. Whatever increases the white and diminishes the amount of red tissues, increases the liability to phthisis. The former is a sign of weakness, the latter of strength. This is easily accomplished by insufficient or improper nutriment.

The depressing passions powerfully promote the developement of tubercles and this they accomplish by emasculating the system of its physical energy, as we see most remarkably illustrated by the religious association of women, to which we have already

referred, and the particulars of which are recorded by Lænnec, who says:

"I had under my own eyes, during a period of ten years, a striking example of the effect of the depressing passions in producing phthisis; in the case of a religious association of women, of recent foundation, and which never obtained from the ecclesiastical authorities any other than a provisional toleration, on account of the extreme severity of its rules. The diet of these persons was certainly very austere, yet it was by no means beyond what nature could bear. But the ascetic spirit which regulated their minds, was such as to give rise to consequences no less serious than surprising. Not only was the attention of these women habitiually fixed on the most terrible truths of religion, but it was the constant practice to try them by every kind of contrariety and opposition, in order to bring them, as soon as possible, to an entire renouncement of their own proper will.—The consequences of this discipline were the same in all: after being one or two months in the establishment, the catamenia became suppressed; and in the course of one or two months thereafter, phthisis declared itself! As no vow was taken in this society, I endeavored to prevail upon the patients to leave the house as soon as the consumptive symptoms began to appear; and almost all of those who followed my advice were cured, although several of them exhibited well-marked indications of the disease. During the ten years that I was physician of this association, I witnessed its entire renovation two or three different times, owing to the successive loss of all its members, with the exception of a small number, consisting chiefly of the superior, the gate-keeper, and the sisters who had charge of the garden, kitchen, and infirmary. It will be observed that these individuals were those who had the most constant distractions from their religious tasks, and that they also went out pretty often into the city, on business connected with the establishment. In like manner, in other situations, it has appeared to me that almost all those who became phthisical, without being constitutionally predisposed to the disease, might attribute the origin of their complaint to grief, either very deep or of long continuance."

Besides the food mostly used in tropical climates there are other causes of debility, and consequently of tubercular affection. Digestion is proverbially incomplete, and therefore less nutriment is derived from a given amount of food than is extracted from it in more northern latitudes. Less oxygen is consumed in hot than in cold climates—the blood is impoverished, and all the organs are consequently more or less enfeebled. The chief difference between tropical latitudes and temperate or cold climates, consists not so much in the intensity as in the duration of the heat. In the latter, the mercury frequently ascends nearly as high as in the former, but it does not last so long. The heat of the day continues a greater number of hours, and the summer embraces a greater number

of days in the latter than in the former. This, therefore, keeps the skin in a state of almost uninterrupted excitation and the abundant and protracted sweats that follow is, of course, a source of debility. In consequence of the centrifugal direction thus given to the fluids, phthisis, according to M. Cruz Jobins, is much more frequently terminated by colliquative sweats than by colliquative diarrhœa, the latter being a more common accompaniment of phthisis in cold climates than the former. The author just referred to, also states that in hot climates tubercles are rarely found in any other part than the lungs. This does not correspond with what is observed in temperate or cold latitudes.

Fortunately, several years residence in inter-tropical climates is necessary to produce in persons from the north of Europe, that modification which favors the developement of tuberculous cachexy and even those, who have contracted it under the influence of a cold climate, find a residence in hot countries of much advantage. The author has observed for several years but few Europeans in the hospital of Rio, and in support of his allegation, he appeals to the testimony of the inhabitants of Brazil and of M. Levacher de Cooplam.

From the statement made in regard to the patients treated at the general military hospital of Chatham, England, it appears demonstrated that a protracted residence in hot countries, and the diseases of those countries give birth to tuberculous cachexy. It is a very great mistake to suppose, that the tendency to tuberculous affections cannot be formed in hot climates. The long continued application of heat in early life is weakening, and therefore favorable to the formation of the tuberculous habit; and it is found by experience, that the natives of those climates, both white and black, are peculiarly liable to tuberculous affections, especially when they come to the colder climates; from which it obviously follows, that if phthisis is less frequent in the warmer regions of the earth, it results, in a great degree, from the fact, that the inhabitants are exempt from the action of cold, doubtless, one of its most powerful external causes.

Although it is often of real importance to remove young persons evidently predisposed to tuberculous affections, from a colder to a warmer climate, at the period of life when those diseases are most apt to appear, in order that the excitation of the disease at that period may be avoided; yet it is a great mistake to suppose, that

this measure furnishes any security against tubercles in future, if they shall return to their native climate, and be there fully exposed to the causes of such diseases. Dr. Johnson says, the most serious consequence of a return to Europe, after a long residence within the tropics, is the exasperation, and even the production of diseases of the chest.

To those who are in an advanced stage of phthisis, a residence in hot climates, according to the testimony of a large majority of good observers, is very injurious. Already feeble, those exhausting discharges to which the consumptive are liable, are always much increased by intense external heat. An elevated and a moderately dry heat exerts a favorable influence on those predisposed to phthisis, but if it is continued for several years in succession, it proves prejudicial by enfeebling the vital energy. It has been observed by Dr. Clark, that strumous children, when sent into Italy, thrive very well for some time; but when they reside there for several years, they grow too rapidly—become tall and weak. That the constitution may be fortified, it is necessary that the organism react against various and opposing temperatures. Children brought up in the colder climates, if of healthy constitution, are well fed, and duly protected from the excessive or long continued application of cold, acquire a decidedly stronger habit of body, from the habitual stimulating effect of alternations of temperature, than those who are never exposed to such alternations; and therefore resist phthisis when the latter would fall into it; and the natives of the colder climates, therefore, while they are more frequently exposed to the external causes of tubercles, have also at their command more effectual means, if duly and cautiously employed, of fortifying the constitution against it.

Dr. Dujat is of opinion that notwithstanding the susceptibility of the digestive organs, we may and should always place those predisposed to phthisis gradually on the use of animal regimen.—This is an useful and a very valuable suggestion. We are persuaded that very often tubercles have been developed, because patients have been injudiciously confined to a weakening liquid or vegetable diet, and when they have been already developed, such a course of regimen has, as far as our observation extends, always precipitated the disease. Dr. Armstrong remarks, that "with a view to prevention, if you maintain the general strength in the children of families where consumption prevails, and also in adults, you will

prevent the occurrence of the disease; break up the general strength and the disease will be developed." "Since it appears," says Dr. Baron, "that whatever enfeebles the frame, or deteriorates the constitution, predisposes to the disease in question, [tuberculous,] how shall we avert this predisposition. The answer is apparent: we must do every thing in our power to invigorate and fortify the frame; to bring all its functions into a healthy state; and by all means to endeavor to keep them so." This is the opinion of Dr. Stokes, and of several other able physicians who have written on the subject. If it be important to preserve the strength, how can this be best done? By liquids and vegetables, or animal food? From the latter, much the most nutriment is derived, and therefore, without going into a long and an useless argument to prove it, it should be preferred. If we weaken a predisposed individual, we hasten the developement of tubercles. If they are already in a crude state, what benefit is to be derived from a reducing diet? The quantity of blood it is true is diminished, and absorption is increased; but this cannot remove the tubercles, for they are not vascular, and cannot therefore be absorbed. But the general strength of the system will be very much impaired, and they will be softened instead of being absorbed, as all that produces debility favors this result. If they have been softened, a diet that reduces the amount of the circulating fluids will accelerate the appearance of hectic fever, for by increasing absorption, you hurry the absorption of pus into the system. Nor will such a course promote expectoration, as whatever weakens the powers of the general system will have the effect to enfeeble those of expectoration.

But if with the liquids used, vegetables are combined, what advantage will be derived? Colliquative diarrhœa is very generally present in cases of phthisis, and this is known to arise from ulceration of the bowels. Now, should we not, to diminish this exhausting discharge, recommend a diet that will not produce irritation, and that will also remain the shortest possible time in the bowels? In both these respects, animal is much superior to vegetable diet. The former is completely, the latter is very imperfectly digested in the stomach,. This is proved by the experiments of M. Londe, and also, that besides passing into the bowels comparatively but little changed, vegetables remain for hours there, and must consequently be a source, to the already highly excited mucous membrane, of great irritation. The ulceratiois thus increased, and

the exhausting diarrhœa very much exasperated. This is not fancy, but fact—let the practitioner make comparative trials of animal and vegetable regimen, and he will no longer hesitate in regard to which is the safest and most useful.

Nor is another remedy that is very frequently used for the two-fold purpose of prevention and palliation, less irrational or prejudicial. We allude to the practice of frequently bleeding those predisposed to tubercles. It has the same deleterious effect that the other enfeebling agents already mentioned have. To bleed during the course of phthisis, unless actual inflammation is present, softens tubercles, causes the absorption of pus, hastens the appearance of hectic, and abridges life.

Exercise is exceedingly serviceable to those predisposed to phthisis: to the feeble and delicate, passive exercise will be found the most beneficial—for such, some species of vehicle should be preferred. When the strength is sufficient, equestrian and pedestrian exercise, alternately used, should always be resorted to.—Much may be expected especially from the former, as many reported cures since the time of Sydenham, have been ascribed to it. Journies of two or three months duration are considered very useful: the remarkable susceptibility of tuberculous persons to atmospheric vicissitudes is thus diminished and sometimes removed. Dr Johnson confides very much in such journies, not only as a means of counteracting the tuberculous predisposition, but as valuable in eradicating the disease when it has not made much progress. Long voyages, when in the course of a few weeks they pass through different latitudes, are considered by M. Dujat as very salutary. He considers them advantageous, not only during the period of predisposition, but as exceedingly beneficial in suspending the progress of confirmed phthisis. Sea air is more pure and more frequently changed: the motion of the ship gently excites the whole economy; sea-sickness, which is generally intense during several of the first days of a voyage, produces a general perturbation which is considered very favorable to digestion. According to the testimony of mariners, catarrhs are not so common on the high seas as on land and indeed, they are rarely seen until after they come within soundings.

When at sea, it is difficult to use any other than passive exercise. A voyage should, therefore be preferred by those who have not strength to indulge in any of the different varieties of active

exercise. Land and sea travelling should be alternate when possible, as their combined influence is more salutary than either of them separately or exclusively. Sailing is particularly well adapted to those who labor under hæmoptysis, fever, &c.

A Complete Practical Treatise on Venerial Diseases, and their immediate and remote consequences. Including observations on certain Affections and Discharges. By WILLIAM ACTON, *late Externe at the Female Venerial Hospital, Paris.*

In this notice of the work of Mr. ACTON, we do not design a full analysis although its contents are interesting and important.—We wish merely to direct the attention of the reader to a few points, with which perhaps he may not be sufficiently familiar. It should be remarked that the acquaintance of the author with venerial complaints was formed chiefly under the eye of M. Ricord, whose celebrity in the treatment of such diseases has extended throughout Europe. With his success we are from personal observation acquainted, and we willingly bear testimony, with the author, to his superiority as a venerial surgeon.

Before we enjoyed the advantage of M. Ricord's instruction, our ignorance of the cause of the obstinacy, indeed intractability, of many cases that appeared to be simple Gonorrhœa, was a source of great embarrassment to us. Now, however, their nature being perfectly understood, we treat them as we do common Syphilis, and with entire success. With the view of making our readers acquainted with the subject, we present them with the remarks of Mr. Acton, derived from the clinical teaching of M. Ricord, on the *diagnosis between simple and virulent Gonorrhœa.*

"The previous views of authors show how much difference of opinion existed on this subject when M. Ricord undertook to show that the cause of a virulent blennorrhagia depended upon the complaint being complicated with a *chancre.* In women, more especially, he found that what was called a virulent gonorrhœa depended upon the existence of ulcerations, which could not be discovered by an examination of the external organs of generation, but which the use of the speculum clearly proved to exist; but did all ulcerations give rise to a virulent gonorrhœa? was the next question to be solved. At the time this eminent surgeon was investigating the subject, he often had occasion to treat the women from whom some of his male patients had contracted the disease, and he found that there were various forms of ulcerations, the secretion of which caused simply a mild gonorrhœa: there existed oth-

ers, however, which caused sometimes chancres on the glans penis and prepuce; on other occasions, virulent gonorrhœas. In vain did he try to distinguish these ulcerations by their physical characters. It was only by inoculation that he was enabled to prove why sores similar in appearance gave rise to such different consequences. Inoculation soon showed him that there may exist an ulceration of a *specific* character, which will be described in its proper place, and called chancre; but there likewise exist ulcerations of a *simple nature*, the result of an inflammatory state of the mucous membrane, which were frequently the consequence of a blennorrhagia. From this moment that which was previously doubtful became clear, and an inquiring and observing mind like his was not long in deciphering what had been the *opprobrium medicorum*.

From what the speculum showed clearly to exist in the vagina, he naturally concluded that similar appearances might exist in the urethra of the male, but which from its small size, it was impossible to demonstrate. However, one opportunity of examining the urethra, followed soon after by a second, put him in possession of two cases, which he showed to the Academy of Medicine, in which chancres existed in the whole course of the urethra. He thus discovered the key to this hitherto difficult labyrinth; and concluded that the only diagnosis between virulent and mild blennorrhagia is derived from inoculation.

The experiments, frequently repeated, of inoculating with the secretion of a simple mild blennorrhagia, produced only a slight irritation, which subsides in a few hours; whereas, if the complaint is virulent, or, in other words, depends upon, or is complicated with a chancre, which is concealed, or which can be brought into view by the speculum, the secretion introduced under the skin, in a similar way as in the former expermiment, will produce a vesicle, pustule, and chancre. This, then, I call the *certain pathognomonic* diagnosis of a virulent blennorrhagia. A rational diagnosis may be drawn from the rosy, thin, serous, or rusty color of the discharge, provided such be present, as well as from an indurated spot in any point of the canal, accompanied with fixed pain, &c.

Should buboes follow, which on inoculation give rise to the characteristic pustule, it may be asserted confidently that the blennorrhagia is a virulent one. The occurrence of secondary symptoms, which only follow in a few cases, gives a further diagnosis of the same fact.

It is, however, the rational diagnosis that the surgeon must usually depend upon, as inoculation cannot always be proposed, or he may find patients object to submit to it; he must, however, remember that it is but a rational one, and on such data be cautious how he risks his reputation by giving an opinion."

Much idle apprehension, as we conceive, exists in regard to the speedy or sudden suppression of Gonorrhœa, with many members of the profession; and indeed this feeling is so extensive that it has reached and awakened the prejudices of the public. Now, we would remark that we have uniformly aimed to arrest the discharge as soon as possible, and though our practice in venerial complaints, has been for years extensive, we have never witnessed

any bad consequences to result from the course we have pursued. In reference particularly to swelled testicle, I can truly say that I have never seen that event happen when it could be, with any propriety ascribed to the sudden suppression of the discharge. I have seen swelled testicle supervene as often during the enforcement of a mild as of a stimulating treatment. Injections are considered as specially productive of the accident referred to. This is doubtless an erroneous opinion. We have seen it happen as often when they had not been as when they had been resorted to. Indeed we have seen it in Gonorrhœa when no treatment of any kind had been instituted, so that we are more inclined to believe it to be a part of the disease than an effect of injudicious management. We take pleasure, therefore, in furnishing the following extract from the work of Mr. Acton, in confirmation of the tenor of the remarks just made.

"A patient will sometimes ask the surgeon if the treatment he is about to prescribe will give rise to a stricture or a swelled testicle. It is a very common error to suppose that the treatment will occasion either of these complaints, and this, like many other popular errors, has taken its source in medical writings, which have stated that a blennorrhagia speedily cured will give rise to various other complaints. M. Ricord says, we may state distinctly that no ill consequences are to be feared from any treatment, provided it is not grossly improper. If (pursues that surgeon) I were disposed to be aphoristic, I might say that the ill consequences will be few, in proportion as the cure is speedy; and I defy any one to produce a case cured in twenty-four hours from its commencement, which has been followed by any ill consequences. There are prejudices against speedily curing a blennorrhagia, and I may be told by some surgeons, 'after a practice of full thirty years, I am of of an opposite opinion.' But I ask, may not such a practitioner have labored under a mistaken notion during thirty years? Is implicit belief in a fact for that space of time, a proof that that fact is true! Has not an old author said, and very truly, 'experientia fallax?'"

It appears that there may be in some cases, a difficulty in determining whether a man is suffering under a gonorrhœa or not, and with the view of elucidating this point we quote the subjoined remarks:

"Every tyro in medicine will at once distinguish what he calls a clap, by means of the symptoms above described: but such a person may not be aware that a surgeon cannot always decide at once whether a man is suffering under a gonorrhœa or not, provided no discharge be observed, and the lips of the urethra be not inflamed, and no stains seen on the linen. M. Ricord gives the following instance of the occasional difficulty. He was ordered by a magistrate to give an opinion whether or not a prisoner, said to have violated a girl, was labouring under

gonorrhœa or not. The accused presented no swelling of the lips of the meatus; on pressure, no discharge came from the urethra, and there existed no traces of any secretion on the shirt. When interrogated, he had made water six hours previous to the examination. As M. Ricord had some suspicion, he ordered him to pass his urine at once, and desired one of the gaolers to watch his prisoner; in six hours after M. Ricord returned, and then found undoubted marks of an existing gonorrhœa; the prisoner confessed he had made water previously to the first examination, and had taken care to remove the secretion as soon as formed by a piece of lint which he had concealed for that purpose."

The Reviewer, in the last number of the Medico-Chirurgical Review, in reference to the above extract says:—"We have never seen an 'undoubted' gonorrhœa without an obvious vascular fulness of the mucous membrane. On averting the lips of the urethra, it is either seen florid, with punctuated redness (we employ a lens) and a semi-abraded appearance, as if the epithelium were partially removed, or the veins of the mucous membrane are enlarged and tortuous."

This does not correspond with our experience. We have repeatedly seen cases of "undoubted gonorrhœa" when there was no perceptible vascular fulness of the mucous membrane or floridness or punctuated redness of the lips of the urethra. Besides the ardor urinæ nothing of this kind, could be observed in a case recently under our care, and which yielded promptly to the ordinary remedies. It is true we did not employ a lens, but the reviewer should have remembered that he had stated that the "vascular fulness" of which he speaks was "obvious" and if that were so, no lens was necessary; for if we understand the import of the word "obvious," it means any thing that is readily perceived by the eye or the intellect.

The reviewer in the same periodical, makes some very silly remaks in reference to the following extract from the work of Mr, Acton:

"M. Ricord states that the French female in high life is now so reconciled to the use of the speculum, that he often receives notes requesting his attendance, and, in the postscript, a demand that he will bring his speculum. At the hospital, when M. Ricord took the service in 1830, a revolution broke out, and *a strike* against the speculum occurred; however, a few days of bread and water quieted this revolt of the harem, and now the women are so convinced of the benefit, that they think no more of its introduction than they do of having a blister dressed. They can, however, appreciate instantly the tact of one surgeon over the other in introducing it."

The reviewer says:—"Certainly this latter is an enviable distinction, and one that a surgeon may be proud to earn. Mr. Acton anticipates the period when the absurd objections now entertained by English ladies will yield, and like the French, they will send a note to the Doctor, with a P. S. [notoriously the portion of a lady's letter in which she speaks her mind] for a speculum. Mr. Acton anticipates this, and that 'time will overcome the prejudices which exist' against the instrument. We confess that we are among those who hope that these 'prejudices' will always be characteristic of our countrywomen, and that it will be reserved for the most abandoned class to *request* the introduction of the speculum."

Such levity on a delicate and an important subject, is in bad taste and evinces worse judgment. That women unacquainted with the necessity for the use of the speculum, should submit with reluctance to its introduction is natural and commendable, but that they should peremptorily refuse after its utility has been explained to them, is idle and ridiculous, or that they would refuse, no physician believes who has any knowledge of the bodily anguish, they seem, too often doomed, to endure. A sensible woman will never suffer delicacy to be the cause of a deriliction of duty; and that it is her duty to use all proper means to restore her impaired health, no one will doubt who knows any thing of the responsibilities of a wife or a mother. If on the ground assumed by the reviewer, the speculum is to be excluded from practice, then every obstetrical instrument must share the same fate. They all do great violence to the feelings of the sex, and are never suggested by the accoucheur, or submitted to by the patient, but from absolute necessity.

Why should not a respectable and modest woman "*request* the introduction of the speculum?" If, after she has become familiar with the great and instantaneous relief which it affords from its having been employed with success in the cases of her acquaintances and friends, and from the nature of her sufferings, which have not been cured or palliated by the ordlnary modes of treatment she believes its introduction necessary, would she forfeit the character of a modest woman were she to request it, in the event of her physician, as bashful as the reviewer himself, not having made any allusion to it? Certainly not, but she would be casting a severe rebuke upon him for his ignorance or imbecility.—

In health, women may cultivate these extravagant notions of delicacy, but in disease they should yield with stoical resignation to the necessities under which their afflictions place them.

It is nugatory and idle to invoke feeling as an umpire under circumstances of disease. In the great majority of female complaints, the use of the speculum may and should be abstained from; but in a few, and those producing great bodily suffering, the physician and patient are not left to their discretion, if relief would be obtained. Aggravated cases of leucorrhœa present us with examples. This disease, at first, consists in mere congestion—then there is inflammation and ultimately ulceration. In most, if not all, of those instances where the disease has continued for years, and has resisted the common modes of treatment, ulceration will be found to exist, should the speculum be introduced. Under such circumstances the injections commonly resorted to will prove wholly unavailing. A few applications, however, of the Nitate of Silver, will in the course of a few weeks, affect a complete restoration of health. To use this remedy successfully, the speculum is indispensable, and I never hesitate to suggest it in obstinate cases of leucorrhœa.

Nor is it much less necessary in the treatment of chancres, situated on the neck of the uterus, which is their very frequent locality. Gonorrhœa in females is much more difficult to manage than when it occurs in males. Its seat in the sexes is not always the same. Very often in women its location is the mucous membrane of the vagina. A single application of the Nitrate of Silver, generally effects a cure in from twenty-four to forty-eight hours. Illustrations of the importance of the speculum, might be multiplied to almost any extent, but these are sufficient to prove the superiority, which it gives to the physician, who is willing to use such means as are necessary to cause its introduction into practice.

A Practical Dictionary of Materia Medica, &c. &c. by John Bell, M. D., *Lecturer on the Institutes, &c., Philadelphia.—* 480 *pages, octavo.*

This book has been before the public, more than half a year, and as yet, we have seen no notice of it, in the periodicals. Nor is it our design to enter into an investigation of its merits, but

merely to call the attention of the profession to it, as an addition, in some respects valuable, to our stock of works on the important subject of which it treats.

As the Editor, in his preface, refers to the omission, in the English edition, of articles that are indigenous to, or common in this country, it was to have been expected, that those deficiencies would have been obviated in an American copy. To some extent this defect has been supplied. Yet, we have not been able to find, either in the index or in the body of the book, any notice of *Phloridzine*, an article proposed and actually employed as a substitute for the sulphate of quinine. Nor of the excellent cathartic, that during the American war, was in very general use, and which is yet a popular medicine, viz: the *Juglans cinerea or white walnut.* Nor of a remedial agent, which from its employment by some of the author's well known friends in Philadelphia, and especially from its high value in the estimation of the late Professor Wistar, should have given it a place, at least, in an American edition of a book, designed, in part, to treat of remedies peculiar to, or much employed in this country. We allude to the *erigerum Philadelphicum*, which grows every where around the city of Philadelphia, and is called by the common people, *scabious.*

Other omissions of like character might be named, but these may suffice to direct the attention of Dr. B. more specifically to the subject, in a future reprint of the work. M.

Physiology and Animal Mechanism.—First Book of Natural History, prepared for the use of Schools and Colleges. By W. S. W. Ruschenberger, M. D., *Surgeon in the United States' Navy, Fellow of the College of Physicians, &c. &c. From the text of Milne Edwards and Achile Comte, Professors of Natural History in the Colleges of Henri IV. and Charlemagne.*

An analysis of the work, the name of which heads this notice, is not intended; nor is it practicable from its very nature and design. The facts in regard to Physiology and Animal Mechanism, are already so condensed, that it would not be easy to present them in a smaller compass, and the object of it being, to bring the subjects of which it treats within the comprehension of those in the pursuit of elementary education, it cannot be interesting to strictly medical men, further than to know that it is an effort to introduce the

teaching of a knowledge of the mechanism and functions of the human body, into schools and colleges.

At this no liberal or enlightened mind can be displeased or dissatisfied. A better general acquaintance with the physical structure, is absolutely necessary to the correct understanding of the mental organization of man. The latter subject has been much attended to by the general scholar, but his studies have been always much embarrassed by a deficiency of anatomical and physiological knowledge, and the errors into which this leads him, appear to no class of men so striking as to well informed physicians. If men would know themselves, and this study has been insisted on from time immemorial, their researches should be prosecuted in the first place, into the structure and functions of the human body. A general acquaintance with these branches of learning will prepare them for the study of mental phenomena. This requires a maturer intellect—more extensive observation, and a wider reach of thought than that of anatomy. The habit of consecutive thinking and reasoning, is also necessary, which, in but few instances, is acquired at an early period of life.

The First Book of Natural History, prepared for the use of schools and colleges, by Dr. Ruschenberger, is well calculated to impart the preliminary knowledge, to which reference has been made. The materials of the work have been derived from the most authentic sources; i. e. from the text of Milne Edwards and Achille Comte, Professors of Natural History in the colleges of Henri IV. and Charlemagne; which constitutes a sufficient assurance, that it is admirably calculated to convey to the young mind the kind and degree of knowledge, which was designed and which all must consider so necessary and important. The structure of the organs is clearly described, and their functions concisely and accurately explained.

Works on the various departments of Natural History, have heretofore been so volumnious and technical in their character, that they have alarmed and deterred the general scholar from their attentive perusal. In consequence of this, we find in the best informed circles of society, a most disreputable ignorance of the subjects of which they treat—an ignorance of branches of learning inconceivably useful, and in many respects highly ornamental. This, the work of Dr. Ruschenberger, is calculated to remedy, and it is to be hoped that it will become so popular, and he will be so en-

couraged, as to persevere in the preparation of the other brief treatises in the several departments of Natural History, to which he has referred in his preface.

MONTHLY PERISCOPE.

Endermic use of Sulphate of Quinine in very large doses.—In the American Medical Library, for August, 1841, Dr. Corbin, of Va., gives the following facts. He had a case of intermitting fever, of 18 months standing, that had resisted all ordinary means of treatment. He resolved to try the endermic use of sulphate of quinine, on a large scale. To this end, a blister was placed on each extremity and one over the epigastrium, an hour before the expected paroxysm. At the end of eight hours, the cuticle was detached, and a cerate applied, spread on soft linen cloth, made of one ounce of simple cerate, and 300 grains of sulphate of quinine. These dressings were ordered to be left on the parts until they were healed. The result was a complete cure. No unpleasant symptoms occurred worthy of special notice or treatment.

Poisoning by the Sugar of lead.—A recent French Journal gives the case of a young girl who was destroyed by an ounce of sugar of lead, after 25 hours of intense suffering. She was almost instantly seized with symptoms of collapse, syncope, &c. &c., then with vomiting and convulsions. Large quantities of sugared water sulphate of magnesia, and sulphate of soda, were given without effect. Lead was found in the urine.

Poisoning by Opium.—An interesting case of the successful operation of cold water, poured on the head of a person under the influence of a very large portion of opium, is given in the London Lancet for January, 1841. Emetics had been freely employed, and the poison dislodged from the stomach. The cold water was poured from a considerable height, for half an hour.

Cold ablution in Pertussis, Catarrh, &c.—Some interesting facts are given in the Lancet for October and December, 1840, of

the happy effects of cold ablution, in arresting these affections.—The water was applied so cold, as to excite a sense of horror in the patient, and then the skin rubbed quite dry with a common towel.

Iodine in Phthisis.—In one of the recent foreign journals, Dr. Leigh gives the following hints, on the use of iodine in Phthisis.—He directs the patient to place some iodine ointment on the ribs under thc axilla and to cover the head with bed clothes, so as to confine the iodine vapours. The ointment sets up counter-irritation and the vapor inhaled is also serviceable. This application is to be repeated according to the urgency of the case. It is suited to tuberculous phthisis, especially.

Tincture of Iodine for Phagedenic Ulcers.—M. Ricord, reports very favourably on the use of this tincture, for phagedenic chancres. It soon modifies the ulcerative process, and greatly accelerates the cure. Less than a month suffices for this end, in many cases.

Nitrate of Silver in Gonorrhœa.—Mr. Foster, in the Lancet, for December 1840, speaks highly of an injection of Nitrate of Silver, in the treatment of Gonorrhœa. He added 3 grains to 8 drachms of water, and this was used three times a day. It is said to be adapted to recent cases, with high inflammation. By the fourth day, all the inflammation had disappeared, and on the seventh day, the patient was quite well.

Galvanism---a cure for the bite of reptiles.—M. Breschet in the Gazette des Hospitaux, for 1841, gives some interesting facts that may prove valuable in the treatment of poisoning by snakes, adders, &c. &c. He inoculated birds with the virus of some West India reptiles, and they speedily died, unless the agency of electricity was resorted to. An electrical current was established from the inoculated spot, by means of a metallic wire communicating with one of the poles of a galvanic pile in active operation, the other end of the wire being in contact with another part of the animals body. Under this influence, the morbid action induced by the poison, gradually diminished, and at length ceased.

Stains caused by the Nitrate of Silver.—To efface the blue spots resulting from the internal exhibition of Nitrate of Silver, the hy-

driodate of potash has been highly recommended. Mr. Dawson an English physician, affirms, that it will almost instantly cause the stains to disappear. He does not specify the mode; but it is probable that the watery solution was employed. A drachm to an ounce of water, might answer for a trial.—*Lancet December* 1841.

Iodide of Iron.—It has been found difficult, to preserve the integrity of this useful medicine, owing to the rapid tendency to decomposition, and Dr. A. T. Thompson has lately given a plan, (which he acknowledges to have borrowed from a foreign journal,) by which this end may be attained. Supposing the solution to contain 3 grains of Iodide to a drachm, and this made into a syrup in the usual way, Dr. Thompson, adds to this drachm of syrup of iodide of iron, a drachm of white sugar, and then evaporates the whole to just one drachm. In this state, it is said, that the iodide will keep for a long time, unchanged.

100 *Grain doses of Sulphate of Quinine.*—In a letter from Dr. Lewis to Professor Jno. K. Mitchell, of Philadelphia, dated Paris, March 1841, the following interesting statement is made.

"At the Hospital de la Pitie, I have seen the sulphate of quinine used in a wholesale manner, for the treatment of intermittent fevers, supposed to be caused by and dependent on enlargement of the spleen. The doctrine is held that the fever cannot exist without the enlargement and derangement of this viscus, although the spleen may be hypertrophied and engorged for a time, without producing the fever. This theory has many disciples and many enemies. To relieve this state of things, doses of 50 and 100 grains of the sulphate of quinine are given, and with obvious effect. I have often very satisfactorily percussed the spleen, and marked its limits before the administration of the medicine, in the above doses, and in 20 minutes after its exhibition, I have seen this organ very perceptibly reduced in its whole circumference, and the paroxysms arrested or palliated in an incredibly short time.

Sulphate of Quinine, proper at any stage of Ague.—A writer in the Edinburg Medical and Surgical Journal, for April 1831, advocates the position, that it is not needful to wait for an intermission, in order to give with safety and success, the sulphate of quinine; but that his experience warrants its administration, at any time.

Gangrena Senilis.—M. Roux, has lately confirmed the opin-

ion advanced sometime since, that *the old mans gangrene*, as it is often called, and which usually begins at the toes, owes its origin to a lesion of the arterial system, which causes a compressed state of the vessels, with an obstruction, sometimes partial, but often complete.—*Gazette des Hospitaux.*

Pills of Copaiba, Turpentine and Cubebs.—Dr. Puche, of the Hospital du Midi, advises the following formula for pills which he has found to be very efficacious, in the treatment of Gonorrhœa.

Dissolve in a sand bath some dried turpentine, [white] in an equal quantity of copaiba balsam, and add to the solution as much cubebs in powder, as may suffice to form a consistent mass. The pills or boluses may be covered with a double coating of fish glue, or gum arabic.—*Med. Ch. Review, July* 1841.

Stuttering—new operation for the radical cure.—Dr. Lewis, an American now in Paris, has seen Amussat operate by the section of the genio-glossi muscles, for the radical cure of stuttering; and although he has heard much said of the happy results, he is not inclined to place much confidence in the operation. He has met with those said to be cured, in two instances, but the effects were not as they had been reported.—*American Journal of Medical Science, July* 1841.

In connexion with the above, we remark, that *Dieffenbach*, of Berlin, has reported very confidently of the success of his operations for stammering, as we learn from the *Gazette Medicale*, of March 1841, but it is feared that the lapse of time after the operations was too short, to be sure of permanancy in the result. The able editor of the Medico Chirurgical Review, in his July number, 1841, in noticing the operations of Dieffenbach and others, thus concludes: "We predict that ere another quarter or two have passed, we shall hear very little of curing stammering, either by cutting the tongue, above or below, or by exsecting the uvula and tonsils.

T. D. M.

Phrenology.—A report was recently made to the Royal Academy of Medicine, by M. Rochoux, in the name of MM. Bouillaud and M. Solon, upon a letter of M. Perrot, in regard to the phrenological examination of the head of a criminal, named Antier, who had been executed. From this examination, it resulted, that there was very little correspondence between the cerebral organs and the conduct of the

individual; for although he had had fourteen children, the cerebellum was small; he was a great gourmond, and the organ of *alimentivite* was scarcely discoverable; he had poisoned his comrade for his money, and yet the organ of acquisitiveness as well as that of destructiveness was very small, etc. From which the reporter concludes that the localizing phrenology of Gall, is a chimera, and that true phrenology has yet to be discovered.

Paullinia or Guarana.—Several of the foreign journals of 1841, speak of a comparatively new article under the above names. The first comes from *Paullinia sorbilis*, a native of Brazil, from which the extract called *Paulliania* is made by the Indians. The name *Guarana* is from the semi-savage people, who extract it from the plant, and employ it as diet and medicine.

To prepare the article, the clean seeds of the plant are bruised in a morter and then roasted over an earthen plate. The powder, thus obtained, is moistened with water and left during night. The soft mass is then made into cakes, weighing about a pound. These are dried in the sun, or by a gentle fire, until they become hard and nearly black.

This extract remains good for years, if protected from moisture by the leaves of the plant. Its specific gravity is 1.3. It swells and softens with water, which partially dissolves it. The taste is rather rough, like that of rhatany, with very little bitterness. The Indians carry these cakes with them, in their journeys, rasp them fine with fish bones and add the powder to sugar and water, as a preventive of fevers and as a refreshing drink. They also add it to chocolate, to increase the tonic powers of the latter.

The roots of the Paullinia sorbilis are also febrifuge, and may be employed in infusion or decoction.

Gomez affirms, that this article is efficaciously employed in Brazil, for dysentery and urinary diseases, attended with relaxation, in the dose of from twenty to seventy-five grains, in a glass of water.

The tonic powers, as well as the astringency of Paullinia depends on the presence of *tannate of caffeine.* It may be given in pill, powder, tincture or syrup, as a medicine, and it is also used in the shape of ointment.

NECROLOGY.

On Saturday, the 23d of last month, Dr. Thomas P. Satterwhite, of this city, was thrown from his horse, in the street, and was so severely injured that he expired in about six hours. In the death of this individual, Lexington has lost a valuable citizen,—his acquaintances a warm hearted and generous friend, and his numerous patients an attentive and excellent physician.

TO THE MEDICAL PUBLIC.

The first number of the Western and Southern Medical Recorder, is sent to a considerable number of physicians who have not, as yet, subscribed for it. This is done because the enterprise is a new one, and the editor, is desirous to place it as extensively as possible, before the medical public at an early period of its career. Those, therefore, to whom this number may be sent, it is hoped will give it an attentive examination, and then extend to the work such patronage, as they may think it entitled to. Should the opinion which they form of its merits be so favorable, as to induce them to become subscribers, they will please inform the editor of it as soon as possible, as the second number will be sent to those only, who may give him such notification. As the undertaking will require the immediate expenditure of a considerable amount of money, and as no more copies will be issued than may be absolutely necessary to supply subscribers, he trusts he will be excused for insisting on a strict compliance with the terms of publication, which may be seen by a reference to the inside of the cover. This will prove not only ultimately, but immediately more satisfactory to the subscriber as well as the editor, than a postponement of payment to the termination of the year.

By the regulations of the Post Office Department, every facility, in this respect, that could be desired, is offered. Post Masters are allowed to forward, under their frank, letters written by themselves, containing money to pay the subscription of third parties to any periodical. To render the performance of this act of courtesy less burthensome, the letter should be prepared for the Post Master's signature, by the person wishing to avail himself of the privilege. If this is done the favor will be rarely denied by any Post Master.

The notes of solvent banks, in the state in which the subscriber lives will be received by the editor, without discount.

THE

WESTERN AND SOUTHERN MEDICAL RECORDER.

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No. 2. LEXINGTON, KY. DECEMBER, 1841. Vol. 1.

LECTURE ON SYSTEMS IN MEDICINE.

BY THE EDITOR.

[Continued from page 10.]

The doctrine of irritation, which is considered by every well informed physician, almost as wild as the dream of a poet, or the idle forebodings of fanatacism, exerted a considerable influence over the principles and practice of physic in the valley of the Atlantic, but it never obtained a firm foot-hold in the great plain of the Mississippi. The medical firmament of this rich and beautiful region of country, has been darkened and overcast by a different cloud, which instead of refreshing showers, has poured down storms and tempests, which have swept into the gulph of oblivion, almost every rational principle in the science, and useful precept in the practice. Although the science bloomed abundantly with promise, and was flourishing rapidly to maturity, the blight and mildew came and left a wide waste of desert, with only here and there an oasis of rational therapeutics.

We allude now to the doctrine, which Professor Cooke, has been defending and propagating in this country, for the last ten or fifteen years; a doctrine that maintains that disease consists in *congestion of the venacava*, and that this results from *weakened action* of the heart. Instead, therefore, of the *duality* of Brown, we have here a pathological *unity*, and as an irresistable consequence, we have the practice reduced to a therapeutical *unity*. The whole science of

Pathology consists in congestion of the vena cava, and in an account of cathartics, we have a complete treatise on the Materia Medica. Much as the treatment of disease was simplified by Brown and Broussais, it has been compressed within still more restricted limits, by the author of *venacavaism.* When, therefore, we assert that the author and teacher to whom we refer, has so much confidence in cathartics, and cathartics exclusively, that he looks upon every other class of remedies with the contempt, that a geometrical calculator does on the visions of a poet, we give utterance to the unimpeachable truth. This assertion, so far from being tainted with exaggeration, is not all that should be said on this subject. His disciples, under the influence of a most strange infatuation, rely exclusively on the use of cathartics in the treatment of disease, and therefore, they cannot be induced until years of experience has enlightened and repeated failures alarmed them, to study the Materia Medica. In a school where this doctrine is taught, a chair of Materia Medica must be, not only an useless incumberance, but a tax upon the pupils who resort to it for instruction, that is unjust, and which should not be endured.

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The treatment of disease would be circumscribed within much too narrow limits were it to embrace the whole class of cathartics; what then must be thought when the *venacavaist* restricts it to three or four of them, and in nineteen cases out of every twenty, to one, which is calomel? Thus it may be truly said, that according to this system, the practice of medicine consists almost entirely in giving calomel in the most enormous and revolting quanties. One would suppose that a practice so absurd and preposterous, could not find amongst enlightened minds a single advocate or friend. This, however, has not been the case, for at least, one distinguished individual, from motives of either *interest* or conviction, has impliedly declared it to be the "true mode of treating Western maladies." This may possibly be the fact, but were we to speak from the results of personal observation, we would say, woe to those who may be so unfortunate as to fall into the hands of those who think so!

According to the pathological *unity* under consideration, the most opposite causes produce the same result, and diseases the most antipodal in their character, depend upon the same fundamental morbid lesion. It teaches, that the idea of specific causes producing specific diseases, which require specific modes of treatment, is ab-

surd and improbable; and that in all diseases of whatever character or in whatever respect they may be distinguished by strange and unfamiliar peculiarities, the same species of medication is insisted on, and persevered in, until the constitution or the treatment triumphs. Whether the complaint be mild or malignant—has just made its onset or has existed for days or weeks—the patient be raving in strong delerium, or sinking, with resistless rapidity, into a state of irremediable exhaustion, "the true mode of treating Western maladies" is enforced with a vigor, at which firmness itself would tremble, and courage sicken with fear. In the prosecution of this practice, or rather in the treatment of "Western maladies" no particular rules are to be observed; all the physician has to do, is to fearlessly administer calomel in the largest imaginable quantities. Although this mineral, in the hands of the rash and inconsiderate, often commits the greatest ravages—leaves after its constitutional action the most unsightly deformities—irrecoverably destroys the general health, and causes thousands to drag out a loathsome existence in unspeakable wretchedness and woe, these considerations seem not to alarm the *venacavaist*, or to deter him from the perpetration of the most flagrant enormities.

In the United States, until within a few years, a scruple of calomel was considered a large dose, and in Europe, even now, it is regarded as almost madness, by the generality of practitioners, to venture upon that quantiy. But what is the feeling, on this subject, at this time, in this country, of those, who have adopted the doctrine of *venacavaism*, and believe that it teaches the "true mode of treating Western maladies." The effects of a drachm of calomel are not so much feared, by them, as those of an ounce of salts. By the great apostle of this doctrine, not only scruples and drachms, but even ounces are given without an emotion of regret or a pang of remorse. Shrink not in amazement from a statement so apparently improbable—doubt not an assertion sincerely and solemnly made, though its incredible atrocity petrify you with horror. It will not—it cannot be denied—it stands on record, sanctioned by the authors name, a memorable proof of the most fatal delusion that ever benighted the human mind, or disgraced the profession. This, then, I presume, is the "true mode of treating Western maladies"—it is of this, that "eastern professors" are charged with being ignorant—this is the reason of their incompetency to impart "an original idea, worthy of the attention or remembrance of the Western

student of medicine." Nor will they demur to the allegation, while they may justly boast of their ignorance of the "true mode of treating Western maladies." The monuments of their success as practitioners, and of their competency as teachers of medicine do not consist in loathsome mouths—toothless and boneless jaws—disgusting-deformities—and irretirevably shattered constitutions; they can look around them without shame or remorse, and see on every cheek the freshness of health, and not the flush of approaching mortality.

These desultory remarks are sufficient to show you what has been the general influence of systems in medicine over the practice of physic. Besides circumscribing the resources of the art within very unsafe and much too narrow limits, they oblige the physician to rely, in the treatment of disease, on a few remedies the claims of which rest on the most apochryphal authority, and the ultimate effects of which have often been such as to fill the heart with the blended emotions of anger and anguish. Many of those that Brown did not, at once, stimulate to death, he sent reeling, confirmed and besotted drunkards to a premature and wretched grave; many of those that did not perish in the hands of Broussais, from excessive losses of blood and starvation, were left in an exhausted and exanguious state, to struggle through an almost interminable convalescence or to die of tubercles, the developement of which his treatment had caused; and many of those that did not fall immediate victims to the prodigal use of calomel, were left weak, miserable and shattered monuments of its terrible ravages—spectacles of premature and and infirm old age—of offensive deformity upon which the eye of sensibility cannot look without experiencing the bosom swell with the mingled emotions of disgust and insurmountable horror.

Besides the evils already mentioned, there are others, which necessarily and naturally grow out of systems in medicine, and which are of sufficient importance to have attracted more attention than they have received, and which should long since have caused every physician, who is desirous to promote the interests of mankind and of his profession, to have stamped them with the seal of eternal reprobation. Whenever a system becomes popular, it is sure to cause received and sanctioned modes of practice to fall, sooner or later, into complete desuetude. Being exclusive in principle, and hostile to every thing that does not yield to it immediate and unconditional support, it is exclusive in practice, and wages a war of exterm-

nation on all that proves refractory to its views. The treatment which it enjoins must be adopted, and if you would enjoy the favor of a dominant faction, you must denounce, with it, all that experience and observation have approved. But scarcely has the new favorite completed its triumph, than it is destined, in turn, to submit to defeat, and then, you will perceive, the real value of the mode of treatment, which has been eulogised and enforced by those in the service of a particular system, at the expense of remedies, that stand on the firm basis of experience and observation. It often happens that before a system, once popular, has been discarded and disgraced, another invention of fancy equally novel and fascinating is started, and then the utmost hurry and bustle prevails amongst physicians to accumulate facts in its support, and it is perfectly astonishing what a number, that are called positive and immutable, will rise up, as if by enchantment, in denunciation of every mode of practice that preceded the new favorite. Nor is it less wonderful to see the great number of physicians that will, with unreflecting precipitancy, marshall themselves in angry and frowning defence of the last and, perhaps, the most absurd innovation. That such will be the course of the heedless part of the profession, in regard to every vision of the imagination that is offered, so long as the spirit of system is not extinguished, is as certain, as that the everlasting decrees of gravitation will continue to be obeyed. From this inconsiderate zeal for novelty, and innovation consequences invariably result, which never fail to impair the respectability of the profession and to compromit the interests of mankind. Remedies that are either useless or pernicious, are foisted into a degree of popular favor, to which they are not entitled, while those that have received the sanction of experience, fall into undeserved oblivion.

Such sudden and unwarrantable revolutions should be deprecated by every one who has an intellect to cultivate science, or a heart to feel for the afflictions of suffering humanity. To expect, however, that it will be otherwise, while the present state of things continues to exist, would be unreasonable and absurd. Before an effectual check can be put to the raging desire for systematic medicine, the physiological action of medicines on the animal economy must be more thoroughly investigated and better understood, and their curative agency must be made to rest on the solid basis of observation and experience. But is there any good reason to expect that this will be speedily done? No, I respond—the hope is as wild as

it is visionary. When we see the medical mind so biased, and medical vision so blinded by preconceived ideas, that physicians will exclaim with sectarian enthusiasm, when the merits of a favorite system are under discussion, "I know nothing of the facts upon which it rests, from personal observation, but I nevertheless believe and assert them to be strictly true," would it not be idle to look for a reformation that would prove so advantageous to every interest concerned?

To give the science a proper direction, the minds of those who cultivate it must be disenamoured of all reverence for systems in medicine. They must cease to feel their influence, for so long as they are permitted to exert the slightest sway, objects will be examined through deceptive media, and the truth will never be reached. Honesty and candour on the part of the systematist are no certain guarantee, that he will see objects as they actually exist. In despite of the best intentions, he will be almost certain to see what he wishes to find. Guided by a secret instinct, which it is almost impossible to resist, he rarely fails to become unfaithful in the observation of facts—a special pleader in his reasoning, and a dogmatist in regard to his conclusions. Instead of deducing his principles from the facts he has observed, he invents the former, and goes, then, in search of the latter; instead of accommodating his principles to what he observes, what he observes must bend and prove subservient to what he has conceived. It is to the slave of system, that the axiom of Plato and Spinoza, that facts receive their laws from human thought, is specially applicable.

The true physician, unseduced by the blandishments of hypothesis, and appreciating properly the unsubduable insolence of systematic writers and teachers, is not to be deterred by the apprehension sion that he may be denounced as an *ontologist* or a quack, from maintaining that it is from rational empyricism that therapeutics has derived its most valuable improvements. But what, you may ask, is rational empyricism? It is clincal experience in all its purity, unbiased and unblinded by the reveries of the theorist. It is the faithful observation of facts, and not idle reasoning on what has not been seen. It is diligently to enquire into the secret operations of nature, and not impudently to assume the right to impose laws.—It is to improve the art of healing, not to embarrass its progress by gratuitous explanations, which may give evidence of great fecundity of thought and creative energy of fancy, but which will nev,

er evolve a single truth, or establish a single principle. It has been the wild soarings of the systematiser, into the mystic regions of conjecture and fable, in pursuit of the why and the wherefore, that has sterilized the domain of practical medicine, and involved the treatment of almost every disease in doubt and uncertainty. So true is this, that Pringle, and doubtless many other men of sense, was an avowed defender of empyricism, for on one occasion, after it had been remarked to him, "Let this empyricism be, at least, rational" responded, "no, the less it is so the better, for it is reasoning that has carried us all astray." But this is pushing opposition to reasoning to a preposterous extreme, for empyricism, that is not guided by reason and intelligence, is nothing more than stupid routanism.

The malign influence, however, of systems in medicine, has not been confined to therapeutics. There is another, and a very important branch of medical science, which has deeply felt their deleterious sway. We allude to Diagnosis, or the art of distinguishing one disease from another. Every effort that has been made to reconstruct the science, and to found it upon a systematic basis, has tended to discourage the study of diagnosis, and to render our knowledge of the means of distinguishing diseases more limited and imperfect than, under other auspices, it would have been. Very little reflection will convince us that they have a direct tendency to cause the cultivation of diagnosis to be neglected, and in doing this, they prevent improvement in therapeutics.

Correct diagnosis is the only true and solid basis of sound therapeutics. This I lay down as a postulate, no longer open to controversy. A clear insight into the nature of the diseases which he treats, is not only necessary to enable the physician to profit by his experience, but to enable him to give such an intelligent account of it, as to make it serviceable to others. Unless he has been able to recognize the precise nature of the lesions which he has been so fortunate as to cure, how is it possible for him to make a certain practical application of his remedies to other cases, or how can he convey such an idea of his experience, as to enable others to profit by it? It will be impossible. His own conduct will be guided by chance, as well as that of others.

The evils, which grow out of a deficient acquaintance with the principles of diagnosis are of daily occurrence, and we regret to say that the generality of English writers on medicine, have taken

too little pains to correct them. We find them more solicitous to boast of the success of their remedies, than to inform us of the precise nature of the diseases in which they were employed. The reading of many works, professedly practical in their character, affords but little satisfaction or instruction; for they too often furnish as conclusive proof of the want of the proper kind of knowledge, as they do of hasty and imperfect observation. In diagnosis we find no evidence of precision, their description of the symptoms is often nothing more than a hurried and an unintelligible sketch, and their account of the therapeutical effects of remedies is, so imperfect as to be, almost entirely useless.

This is too commonly the case with those who would be considered practical writers, and it is always the case with those whose observations are appealed to in support of systems. The reason of this is involved in no mystery. When the systematist enters the field of observation it is not with the view of ascertaining in what respects diseases differ, but in what respects they resemble—his object is to find analogies and not discrepancies, and he usually finds what he wishes. His aim is to refer all morbid phenomena to a single lesion, or to some particular morbid condition in order to prove that all diseases, no matter how diversified in appearance, are fundamentally the same. There is, therefore, no motive arising from personal considerations, to induce him to search for points of difference; indeed every striking difference is only a substantial argument against his assumed principle. That points of antagonism should be overlooked, even when they are palpable, and that diseases strikingly unlike, should be jumble together in unintelligible confusion, are not matters of surprise. This being the case, we cannot expect that diagoostic studies should offer much interest to the systematist. Indeed, were we to judge of the importance which he attaches to diagnosis by the length of time which he devotes to its study, we would infer, that he would consider it proper to abandoned its cultivation altogether. For such knowledge he has no imaginable use; he believes in a pathological *unity* or *duality*, and his therapeutics is equally limited in its character.—Believing all diseases to be fundamentally the same, he cannot be persuaded, that an incorrect diagnosis, can be of the smallest consequence. His treatment of all cases being the same, it will correct any errors he may commit on that score.

A neglect of the study of diagnosis. has neeèssarily grown out

of the prevalence of systems in general. This is bad enough, and should be, if possible, speedily corrected. But this is not all. The doctrine of *venacavaism* has, not only caused diagnosis to be neglected and despised, but it has, in some degree, rendered its study disreputable. With so much contempt, indeed, has it been treated by its infatuated followers, that I have heard several of them denounce it, not only as useless, but acknowledge, that they were proud, that they were ignorant of its first principles. With a degree of imbecility, which human sagacity can neither understand nor explain, they believe, that the whole science of pathology consists in congestion of the venacava, and, that the whole practice of physic consists in the employment of cathartics.

Systems in medicine, enfeeble the judgment—destroy all independence of thought, and emasculate the mind of all its natural energy and enterprise. They place the physician in a state of humiliating servitude, as hostile to firmness and decision of purpose, as it is to useful and rapid improvement. In all he says and does, he is a mere automaton, that acts under the impulse given him by a master.—Under their dominion, he suffers others to think for him when he should think for himself, and until he is disenchanted from the spell by which he is bound, as well may he attempt to be of service to himself or others, as a mummy of Egypt to uncoil its own bandages.

To practice physic with success, it is absolutely necessary that the physician should analyze the facts which fall under his observation. This is an arduous task when performed properly, and one of the chief causes why it is neglected, or rendered impracticable on the part of the observer, consists in the prejudicial influence, which has been exerted by systems in medicine. Most men are naturally indisposed to exertion of all kinds, and particularly, that which requires thought, or a habit of consecutive thinking.—They are more ready to yield to the suggestions of others, than to explore and strike out a path for themselves—rather than guide they would be guided. With such individuals systems are always popular. They heave from their sluggish minds, a heavy load of responsibility. This frequently occurs in cases of difficulty and danger. Unwilling to look for expedients, and unable to decide upon their respective merits, they rush forward in the headlong prosecution of some systematic mode of treating disease, headless of consequences; whatever happens, they ascribe it to the system

they have adopted, or the violence of the malady, while they are held, in their own estimation, perfectly blameless. The weight that others bear, when they have confided to their care patients, the fate of whom is involved in doubt and uncertainty, the disciples of systems unscrupulously transfer to the shoulders of a master, and in blindly following his precepts, they silence the voice of conscience. To shake off the prejudices and abandon the practices of a system, once they have become habitual, is extremely difficult. Although disaster and defeat may be a too frequent result of subserviency, men will remain, with surprising obstinacy, satisfied with what they have been taught, and continuing to confide in the instruction they have received, they unblushingly ascribe to nature, the enormities they are daily committing.

Systematists and their disciples, are generally the last to see the errors into which they are led by pursuing a phantom, and consequently, experience is of but little use to them. Having once conceived or adopted a favourite idea, they cling to it with a tenacity and defend it with an enthusiasm, that renders them inaccessible to reason, and consequently, insusceptible of improvement. This obstinacy of adhesion to opinion, is not always to be ascribed to improper or selfish motives. Very often it is owing to an intelligence so limited, that they cannot unlearn what they have been taught, or lay under contribution other means of treating disease, than those to which they have been accustomed. Such individuals seem not to know that medicine is a science of observation and consequently, susceptible of improvement. They forget, or do not know that experience is progressive and that the observations of one epoch, do not necessarily correspond with or confirm those of another, and that the conclusions which they seem to authorize may be very unlike those, which they have been taught, to reverence as true.

But there are others, and these I would be glad to think constitute the bulk of the profession, who are not to be seduced into the support of every air-built fabric of the imagination—who are not to be imposed upon by the shallow and unsubstantial reasoning which systems employ in their defence—who are not to be dazzled by every doctrine that assumes an imposing and a persuasive aspect. They are familiar with the wide latitude of expression, in which a certain class of medical writers are too fond of indulging—they are not ignorant how little remorse it costs *a priori* reasoners to mould facts into the form that fancy may dictate—they have not

to be told, that an idea cannot be so absurd, or a doctrine so chimerical, as not to find hundreds ready and willing to espouse and defend it in the face of the most unanswerable objections—and they cannot be convinced, that there are not hundreds, some of them from ignorance, and for the honor of the profession we believe they constitute a majority, others from vanity, and others from ambition, who publish books, memoirs and essays which are filled with the grossest errors and the most impudent falsehoods and misrepresentations. From a course of literary licentiousness, so inexcusable and defenceless, nothing but evils can flow. The honest enquirer after truth becomes wearied and exhausted with ineffectual attempts to procure the results that are boasted of in books, and soured and disheartened at the repeated impositions which have been practised upon him, by those, in whom he was taught to confide, at last, not only doubts, but disbelieves every statement that is made, and determines to rely exclusively on his individual experience. There are many in this condition and the number does not promise to be less. Nor is this incredulity confined to the members of the profession. It has so infected the public mind, that the uncertainty of medicine has almost become a proverb; and thus its respectability has been impaired, and its usefulness diminished.

In several respects it has been already shown, that systems in medicine have proved prejudicial. On another ground, I would charge them with having influenced professional opinion injuriously. Not only have they circumscribed the therapeutics of the physician too much, but they have uniformly led him into extremes that have never failed to prove disasterous. They have without a single exception, as far as I have been able to make myself acquainted with their peculiarities, enjoined the practitioner to wait too patiently and passively, or to act too vigorously and perseveringly. The former advice, though the more safe and successful, is the less frequently followed. The two modes are technically called *expectation* and *action*. These are the two pivots on which the practice of physic turns, and the success of the physician will not depend upon a strict adhesion to the one or the other, but upon his ability to determine when one should be adopted, or when the other, and when also a judicious union of them should be preferred to either of them separately.

By *action*, we are to understand, the vigorous assailing of disease.

This is done by attacking the causes upon which its existence depends, and when these are unknown or inaccessible, the assault is made on the effects or symptoms they have produced. By *expectation*, we too commonly suppose, that a passive unresisting neutrality on the part of the physician is enjoined. This is a mistake. He must carefully watch the progress of the disease—note its phenomena, and come to the conviction from the data thus furnished, that it will be more safe to confide in the efforts of nature than in those of art, before he can be justified in refusing to act. Neither *action* nor *expectation* is an excuse for ignorance. They both render a perfect knowledge of the malady, and of the remedies that are relied on to cure it, indispensable. There is not less skill and judgment evinced in refusing to interfere than there is in deciding when, and how to act. In regard, however, to the former point, the *venacavaist* seems to possess no knowledge, inasmuch as he exercises no sagacity.—He is taught to act speedily, boldly and uninterruptedly, and so indelibly has this impression been made on his mind, that he believes the "true mode of treating Western maladies," exclusively consists in the active enforcement of the cathartic practice.

Than this, and I say it, free from all personal considerations, it does not appear, to me, that a more dangerous error could take possession of the mind, and it continues popular, for no other reason, I am persuaded, than because no other mode of treatment has been tried, in the diseases of the west and south, on a sufficiently large scale to obtain comparative results. My own experience is certainly any thing else than complimentary to the cathartic practice as it has been hitherto conducted. In numerous instances I have seen patients carried to the brink of the grave by it, and then rescued from danger, by the strict adoption of *la medicine expectante.* In support of this allegation the most conclusive proof could easily be adduced, and yet, so great is the infatuation of certain individuals, that after having witnessed the repeated failure of cathartics, and the success of a totally opposite mode of treatment, they have been guilty of giving drachms of calomel to patients actually in *articulo mortis.*

Although it is not my object, at this time, to teach you when you should adopt *action* or *expectation*, I must pause to admonish you against the superserviceable zeal of the physician, who is constantly hovering around his patients under the dangerous impression that his presence and prescriptions are necessary to their welfare.—

Than this, no grosser error can be committed by the physician, for there is not one, as a general rule, that is more productive of evil. Although a busy practitioner may, by his industry and zeal please those by whom he is employed, he is a very dangerous personage, and his services should be dispensed with by the sick, with the same willingness that they would eschew the fingerings of a pick-pocket. He is never contented unless he is doing something, and consequently he is sure to do too much, and be assured there is more danger in this, than in doing too little. The physician should endeavor to form a fair estimate of the extent of his knowledge and he will rarely err in regard to what he can accomplish. He will, at least, have too much discretion to attempt what are, in the present state of the science, physical impossibilities. It is very important in many cases to understand the art of doing nothing, while there is the appearance of doing much. The anxiety of friends, and the impatience of patients themselves, will not always suffer the physician to be an idle spectator, when it would be decidedly improper to interfere. He must, therefore, learn the art of quieting the former, and of gratifying the latter. without doing anything that would counteract the efforts of nature.

We have still another complaint to make against systems in medicine, and which, perhaps, is entitled to more respect than any of those already enumerated. I allude to the encouragement they have held out to systems of quackery, and the popularity they have given to nostrums, panaceas, catholicons and every other species of swindling that has been practised upon the credulity of the public, by men, who, while they boast of the possession of some infallible remedy for all the ills to which flesh is heir, glory in their ignorance of the science of medicine. That such remedies are popular, and have in all ages been popular, no one will have the boldness to doubt or deny. Now, what is the cause of this? There are many, but the most powerful, I am convinced has consisted in the haughty and extravagant pretentions that have been set up by systems in medicine, and which have not been confirmed, in a single instance. Every successive system has promised more relief to human suffering than any mode of practice that had previously prevailed. So uniformly have they failed to redeem such promises, and so generally have they commanded less success than the schemes of quackery that have prevailed, that the public alarmed at the mortality which results from the treatment of the

regular physician, has, to a great extent, taken refuge in the outstretched arms of charlatanism. The indications of a want of confidence in the systematic practitioner, throughout the great Plain of the Mississippi, have, during the last ten years, most wonderfully multiplied and strengthened. In this assertion there is no exaggeration. So malign has been the influence of *venacavaism* in this respect, and so odious has it rendered the regular practice of physic, with a large portion of the community, that it will require years of assiduity and zeal employed in its repudiation, to redeem the profession from the disgrace into which it has fallen. Nor can it be condemned in terms of too severe reprobation, for, like the baneful upas, it has inflicted death or disaster on all who have saught refuge under its branches. It has already frightfully increased the mortality from disease, and has been for years betraying the profession into the hands of its bitterest foes. The dignity of the healing art has already dwindled into a legend of tradition —its honor has been lost in the mazes of duplicity and falsehood— its respectability has been swallowed up in the vortices of interested factions, and its votaries have been brought into a state of humiliating subjection to the ignorance and despotism of an army of unprincipled quacks. Before the Sirrocco of its breath, all nature has withered—age, sex, innocence and station have perished in the noiseless but certain desolation of its progress. Under its revolutionary sway, sound therapeutics have been completely exterminated, and that too, to humor the ridiculous conceits of an absurd system, which has reduced the science, in this country, into a state of greater degredation than it has ever experienced since the days of Hippocrates. Do you wonder then that the feeble have been strengthened—the wavering decided, and the prejudiced confirmed in their opposition to the educated physician? Forsaken by the public—denounced by his enemies, and his friends flying in consternation from his attainted intimacy, do you wonder that the regular practitioner is sinking into insignificance under such accumulated woes?

Have I spoken with earnestness and inveighed with ardour against the doctrine of *vena cavaism?* If you respond in the affirmative, I shall have no interest or inclination to deny it. What I have said proceeds not, as some may suppose, from the personal objections I may have to its author, but from observation and experience, as well as from the conscientious convictions of sincerity and

truth. Have I appeared hostile to the use of calomel? Then I am not understood. The war which I wage is against its prodigal abuse, and not against its judicious and proper administration.

In endeavoring to pourtray some of the numerous evils with which systems have afflicted medicine, have I made the impression on your minds that I consider the discovery of a great general principle which shall faithfully guide in the treatment of disease, and very much simplify the practice, as impossible? I trust not. The utterance of such a sentiment would be absurd and preposterous. The science, however, has not reached that state of improvement which should authorize the belief or encourage the hope, that the discovery of any such principle will be soon made. In the present condition of things, it would be just as impossible as it would be to measure the dimensions of a cloud when the atmosphere is in a state of commotion. The fruitless efforts which have been heretofore made, renders this a demonstrated truth. The Newton who is to achieve this for the art of healing is still unborn. Remote, however, as this event appears to be, and gloomy as is the prospect, at present before us, we should not despondingly conclude that the discovery of a great principle,—an infallible *criterium* is an idle and fantastic chimera. In the future, there are still hidden many secrets, the discovery of which will be of incalculable benefit to mankind. The animal economy still contains many recesses that have not been explored; indeed, we may say a new world is to be discovered by the physician of some future age, around whose brow are to be entwined laurels, as imperishable as those that flourish on that of Columbus. This has been done already in several of the other departments of knowledge, and why should we not hope and believe that a similar trophy will mark the triumphs of medicine. Navigation discovered it in the compass;—astronomy in the telescope;—geography in the continent of America;—transportation in steam and in railroads, and the diffusion of knowledge in the art of printing, and why may we not cherish the hope that medicine will one day discover a world of its own.

REMARKS ON SCROFULA.

BY THE EDITOR.

Although the term *Scrofula* is in very popular use, it is too frequently forgotten, and that by writers on medicine, too different meanings are attached to it. A failure to recognize the senses in which it is employed, is often a source of confusion, both in speaking and in writing. We find it used by authors to express the actual existence of a particular form of disease in some organ or texture of the body, and also to denote that peculiarity of the general habit, which predisposes it to become affected with that disease, or rather with those kinds of diseased action, which the profession, with considerable unanimity, have decided to denominate *scrofulous*. By scrofula therefore, we should understand the disease itself, and by *Scrofulous Diathesis*, the state or disposition of the body that predisposes to it.

That the predisposition to scrofula may be inherited—may be transmitted from the parents to the children, in certain instances, can hardly be doubted. It is, in other words, sometimes, hereditary. In what does this hereditary diathesis consist? We answer, in a certain profound peculiarity of the organism, which is transmitted from the parent to the child, in consequence of which certain individuals are more liable to particular kinds of diseased action than others. That this should be the case, is no more remarkable, than to observe a family likeness, in temperament, constitution and feature. These are obvious family peculiarities, and evidently depend on organization, and, therefore, it is no more unreasonable to believe that the internal structure should be transmitted from the parent to the child, than that the external should.—Parents entail upon their offspring, a constitution, the same generally speaking as their own; that is to say, a state of the solids and fluids, which was peculiar to, and characteristic of them.

In what does the *scrofulous diathesis* consist? This question cannot be more appropriately answered, than by furnishing the reader, with a few quotations from the *Theory and Practice of Physic of Dr. Stokes*, a work, which, until recently, was in but few hands, and which I am apprehensive, is not still studied with the care and attention, to which its great merits entitle it. By Dr. Stokes it is remarked:—

"We may look on the scrofulous diathesis as a condition of the human body which is to a certain degree imperfect, and which is to be attributed to arrest of developement. There is a period of fœtal life, in which the whole mass of the body consists of white tissues. According as the individual progresses towards maturity, the red tissues become more abundant; and when he arrives at maturity of maturation the proportion between the tissues becomes completely altered, the red being now more abundant than the white. But if this process should happen to be arrested, either shortly after birth or during life, we have then an individual of a lower degree of vitality, and approximating to the class of white-blooded animals. That we may reduce the scrofulous diathesis to arrest of development seems to be borne out by other considerations. We find in persons of a strumous diathesis proofs of arrest of development in various parts, so that whether we consider the question as to the development of the whole or of particular parts of the body, the same conclusion obtains. Scrofulous children have large heads, and it has been long known that they are exceedingly subject to hydrocephalus. The great size of the head in this instance is reducible to the principle of arrest of development; and here we have some explanation of the fact of the activity of the intellectual powers in scrofulous persons. Again, scrofulous children have large bellies; and here we have another proof of the arrest of development. In the fœtus the belly is larger in proportion than it is in the adult; and if the individual grows up with this predominance, it is a proof of arrest of development. The liver in the fœtus, is as you all know very large. Now it is a fact that many persons of a scrofulous habit grow up with this fœtal condition of the liver; and, accordingly, we find this organ enlarged, not as the result of disease, but because an equal and proportionate increase of other parts has not gone on; and here we have another fact confirming the principle of arrest of development. Scrofulous children are observed to have small limbs and contracted chests. Here, too, we again meet with the fœtal condition. In the fœtus the chest is small and contracted, and the extremities are puny and ill-developed. How beautifully this tallies with the state of the lung at that period of life, when there is very little employment for the thorax, and when the active functions of the lung have not as yet been called into operation. This, too, informs us, why it is that such children are so liable to affections of the lungs. We find that scrofulous persons are of a feeble frame, and have weak and flabby muscles; and, in accordance with this, we find on examination that the muscular system to a certain degree represents the condition of foetal life, that the blood is albuminous, and its proportion of fibrin small. We observe that scrofulous children are subject to rickets, and that the proportion of phosphate of lime in their bones is small. Now this is precisely the condition of the bones in the fœtus. Thus, whether we look to the whole or to particular parts of the body, we find that scrofula is reducible to arrest of development, and that there is not in it any virus, any thing particular or specific, as has been erroneously imagined. To these considerations it might be added, that nothing is more common than to see those

monstrosities, distinctly referable to *local* arrest of development, occurring in the scrofulous subject; and the statistics of monstrosity show that in this respect the female sex predominates over the male."

"It may be objected to this view of the question, that we frequently observe persons of dark hair and robust constitutions falling victims to scrofula. This is certainly true, but it is not on that account an argument calculated to militate against the doctrines which have been propounded on the subject. There are many causes capable of producing this increase in the white tissues, this peculiar state of the constitution, which we call the scrofulous diathesis. Excessive mental or bodily exertion, all the depressing passions, injuries of innervation of various kinds, deprivation of light, air, and exercise, early and continued gastro-intestinal irritation, persistent and exhausting diseases—all these have a tendency to impair the functions of nutrition, and to destroy the balance between the different tissues of the body. If we look to those animals in which tubercles are found, we see that they are often those which have been brought from a hot to a cold climate, and kept in a state of confinement for a long time, and hence it is that we so often find fatal tubercular disease in animals which are kept for the purposes exhibition. The same liability to tubercle is observed in several of our domestic animals kept in unhealthy situations, and deprived of air, light, and exercise. The truth is, that a combination of such causes will generate scrofula in constitutions which were originally sound and good; but it will occur at an earlier period, and with much more certainty when these causes are brought to act on persons in whom there is an original or congenital predominance of the white tissues. This fact is so well known as to require no further illustrtration; it is now generally admitted, and you will have many opportunities of verifying it in practice."

"It would appear, also, that this predominance of white tissues may be either congenital, or it may be acquired, and that in this case, it is superinduced by various causes, all having a direct tendency to diminish the proportion of red tissues, and lower the vitality of the system. This, which appears to me to be the true meaning of what has been termed the scrofulous diathesis, you will find to be borne out by a multitude of facts, and you will have numerous opportunities in practice of proving the value and importance of this view of the question."

That the scrofulous diathesis is congenital or hereditary, in certain persons, seems to be sufficiently apparent. Can it be acquired? A brief examination of the causes of scrofula, and of their modes of action, will furnish a satisfactory response to this question.

The causes productive of scrofula are very numerous, and the tendency of the whole of them, is to produce a predominance of the white over the colored fluids, and of the white over the red tissues. This excess of the white fluids is always accompanied by an alteration in their properties, which, if it does not render them

wholly unfit for the purpose of nutrition, makes them incapable of ministering to that function in a healthy and proper manner.

Amongst the most common and powerful of the causes adequate to the production of scrofula, may be mentioned, a residence in cold and humid locations when they are, in a great measure, inaccessible to solar light and heat. This is doubtless the reason why we meet, more frequently with this disease in wet than in dry latitudes, other circumstances being equal. Insufficient and unwholesome diet, holds a conspicuous place amongst the causes of the disease under consideration.*

M. Baudeloque, who has for years, enjoyed the fullest opportunities of observation, is of opinion, that too much importance has been ascribed to the causes, to which we have referred. According to this physician, the respiration of an air that is imperfectly supplied with oxygen, or that is not sufficiently often renewed, is the essential cause of scrofulous affections. The frequency of this disease, in large cities, where the population is very much crowded together in narrow streets, and in small dwellings, and where they are secluded from light and pure air, is appealed to in support of his allegation. Without ascribing to this cause, all the power and importance for which M. Baudeloque contends, it is proper to admit that scrofula is very frequent under the circumstances of which he speaks, and that bad air must, by embarrassing the function of sanguification, impair nutrition, increase debility and consequently predispose to, or actually excite the disease in those in whom the scrofulous diathesis previously existed. Though this is true, especially when bad air acts on the system in conjunction with other enfeebling causes, it should be remarked, that we find many children who enjoy the most perfect health precisely in those situations, which, according to M. Bandeloque, should develope scrofula, and on the contrary, other children falling victims to the disease, in hygienic conditions almost the reverse. This is the result of repeated observation, and it conclusively proves that scrofula does not generally result from bad air exclusively; and that when it does appear to produce it, it is only when it acts on con-

* The reader is referred to the review of Dr. Dujat's work on "The influence of Climates on the Production and Treatment of Tuberculous Affections," to be found in the first number of this Journal, for the editor's views in regard to the agency of food, climate and several other causes in the production of scrofula; that review having been written before these remarks were drawn up.

stitutions, that already labour under the scrofulous diathesis.—Besides, it is almost impossible to observe the exclusive effects of bad air, inasmuch, as those who reside in imperfectly ventilated dwellings are poor, and are exposed to the inconvenience and danger of living on unwholesome food. Their joint is, at least, much more frequently witnessed than their separate agency. The influence of those causes which by impairing nutrition, develope scrofulous diseases has been recognized and acknowledged by physicians, almost universally. Bad air, therefore, which although it directly affects the function of sanguification, manifestly enfeebles indirectly the powers of nutrition, as much and as decidedly, as insufficient or unwholesome food. Were we to admit, however, to the fullest extent, the sweeping assertion of M. Baudeloque, it would not, in the least, affect the correctness of the general position we have assumed: i. e. that the causes of scrofula, produce a predominance of white fluids and tissues, and consequently debility. This condition seems to be necessary to the actual existence of scrofula, whether it be inherited or acquired.

As we have remarked, the tendency to scrofula is, in some persons decidedly hereditary—i. e. those whose progenitors have shown marks of scrofulous disease, become affected in this way, in a much larger proportion than the offspring of others; although it is very seldom that tubercles, or other scrofulous affections are congenital. Feebleness of habit in parents, even independently of actual scrofulous disease in them, appears evidently to predispose to scrofula in the children. This feebleness is often the result of the injudicious and protracted use of mercury. The extravagant manner in which this article has been employed in this country, will furnish any physician, who may choose to direct his attention to the subject with abundant proof of the truth of this allegation. We are taught by experience that the different preparations of this metal, in common use, impart to the whole lymphatic system a peculiar modification, and to the entire economy, a state not only analogous to but almost identical with that of the scrofulous diathesis. It is also believed, that those whose systems have been snbjected to the protracted influence of this metal, often give birth to scrofulous children, when their existed no evidence of the diathesis in any other branch of the family. This is a position which Hunter, Samuel Cooper, Richerand, Alibert, etc., consider fully established, and although they may have expressed themselves too con f

dently on the subject, it cannot be denied, that in those who have been subjected to the action of mercury for a considerable length of time, there exists an organic predisposition to scrofula—not a virus, but only an organization, that predisposes to the disease.

Although not immediately connected with the subject under consideration, we wish to suggest another of the effects, as we believe, of the injudicious use of mercury. Much mercury has been given in this country, in the treatment of febrile and venerial complaints, and in several instances we have observed that those who had been subjected to its protracted action were not fruitful after marriage, or, if they had been so previously to having submitted to the treatment, they were barren afterwards, Not only am I inclined to believe that it impairs fecundity, but that it detracts materially from the virility of individuals; at least more than one has admitted that from some cause, his powers had been impaired.

Many other causes of scrofula might be enumerated, but in this brief article we must rest satisfied, for the present, with those already mentioned, simply remarking that everything that tends to impair the strength of the constitution and to deprive the fluids of their recuperative powers, lays the foundation for scrofulous affections.

It cannot be doubted that the causes of which we have taken a hasty survey, or to which we have referred, do impart to the organism a change—a fundamental change that is favourable to the production of scrofula. The facts to which we have appealed are the incontestible results of accurate observation. But there are other points that merit attention. What is the modus operandi of those causes, and what is the order in which those pathological changes take place, that constitute this disease? The humoralists, who have in succession contended for the acidity, acridity, alcalescency and viscosity of the lymph, have seen in those fancied alterations nothing more than the effects of causes acting on the fluids of the economy, while, the solidists, attributing scrofula, either to an excess or a deficiency of vital action in the lymphatic vessels or ganglions, believe that it results exclusively from the action of the causes on the solid textures of the body. The causes, however, of scrofula, whether physical, organic, chemical or vital, were supposed by all pathologists, until recently, to expend their force upon and to produce a modification in the action of the lymphatic vessels

and ganglions that rendered them unfit for the purposes of healthy nutrition. M. Baudeloque first suggested, that scrofula depends upon imperfect hematosis, and that this is owing to the altered and bad condition of the air that is breathed. If, says that writer, the air respired experiences a change in the relative quantities of its constituent principles—if the oxygen be diminished, and the carbonic acid increased beyond their proper proportions, hematosis will be unavoidably vitiated and imperfect. This is self-evident-and as it is through the agency of this process that the chyle which is introduced into the circulation becomes incorporated with the blood, and brought into a state better fitted to nourish the system; it is certain, that when prevented or imperfect, the nourishing fluid must receive profound alterations in its composition, which render it less qualified to answer the purposes for which it was designed. Not only are the fluids thus vitiated, but the energy of vital action in the solids must be impaired, and the foundation laid in a debilitated state of the system, for the development of scrofula.

No one can doubt that scrofula may be produced by the condition of things which M. Baudeloque supposes, but we are inclined to think, nay, we are satisfied, that he is too exclusive in his views. That the respiration of bad air for a sufficient length of time would alter the fluids, impair nutrition, and weaken the solids, cannot be doubted, but we are not as easily satisfied that, that cause is, in all cases, in such active operation as to produce the result which he has ascribed to it. Nor are we disposed to admit that its agency is so necessary as to be indispensable in every instance.

If scrofula resulted from the alteration of the blood on account of the respiration of air, in which there is a predominance of nitrogen and carbonic acid and a deficiency of oxygen, the symptoms of a chronic asphyxia should be those that mark the early history of the disease, and it should be characterised, rather by disorder of the blood, than of the lymphatic vessels. This, however, is exactly the reverse of what is observed. Nor should we see, as we frequently do, individuals who have enjoyed all the benefits of the purest air, suffering from scrofula, and others habitually respiring the worst air, escaping it entirely, if, as M. Baudeloque supposes an impure air is indispensable to its production.

(TO BE CONTINUED.)

Extract of a letter to the Editor, on the Art of Acquiring Knowledge. By SAMUEL CARTWRIGHT, M. D. *of Natchez, Miss.**

After speaking of another matter, in which the public has no concern, Dr. CARTWRIGHT remarks:

"I must avail myself the present occasion to congratulate you on the continued success and prosperity of my good old alma mater, for whom I shall always feel deeply interested. I have lately met with some of her last graduates, among others, Dr. —— and I must say, that they can proudly compare with the graduates of any other school in christendom. Others may have had more beat into their heads, but your graduates seem to have that better knowledge, the art of acquiring knowledge in, and of themselves, and of adapting the same to meet the varying circumstances of each particular case;† this is the benefit of starting right in the first

* The publication of this letter I trust the distinguished writer will excuse. His remarks on the "Art of Acquiring Knowledge," are so appropriate and will prove so acceptable to our readers, that although not intended for the public, we could not decline giving his hasty sketch of the results of his experience and reflections on an important subject, a place in our Journal; and it is confidently hoped, that so far from complaining of the liberty we have taken with his letter, he will favour us with frequent communications in future.—EDITOR.

† Nor is this an inappropriate occasion to adduce in confirmation of the statement made by Dr. CARTWRIGHT, the testimony of the *honest* and *candid* Professor CALDWELL, of the Louisville Institute. That *noted* individual who is no less remarkable for his *disinterestedness*, than for the *unimpeachable integrity* of his general deportment says, in his "*Thoughts on the teaching and diffusion of the Science of Medicine in Western America.*"

"In no other place but a crowded city, say some, can subjects be procured in sufficient abundance for all the forms of anatomical instruction.

This is a mistake, as the records of the school of Transylvania prove. This institution is now in the ninth year of its existence; and, notwithstanding the trembling apprehensions of its timid friends, and the evil bodings and calumnious misrepresentations of some of its enemies, it has never, *for a single hour*, been in want of a subject for the purpose of anatomy. On the contrary, that of Philadelphia, perhaps, excepted, it is confidently believed to have been more amply supplied, than any other school in the United States. Of this statement, contradiction is fearlessly set at defiance. Besides, the qualifications of its pupils, on their examination for degrees, abundantly show, that, in no other institution of our country are there found more thoroughly disciplined anatomists."

instance on sound principles, otherwise all knowledge or learning is too apt to resolve itself into chaos, when needed for use. Do you ask how I know this? Nothing is easier to find out. Pupils at school, after so long a time, may be taught to pronounce the most of the words they meet with, very correctly, as Johnson and Walker would pronounce them; yet they may be entirely ignorant of the nature of accent, and the fundamental principles of orthography; even so ignorant as not to be able to derive any help from a pronouncing dictionary. And would be apt to give such words as Leviathan, Laocoon, the pinultimate, and Laodicea, Cœsarea the anti-pinultimate accent. Yet when informed that the words, to which they applied the pinultimate, should have the anti-pinulmate accent; and vice versa, to be no wiser than they were before simply from not knowing the practical difference between the two accents—scholars thus taught, no matter how much learned lumber they got in their heads, would find it of little or no value in prac-

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Again in regard to the success of the Medical School of Transylvania, in making surgeons, the same writer remarks:—

"It is further asserted, with what spirit, and for what object, I neither know nor care, that without the resources of a large city, instruction in surgery cannot be imparted, with competent effect, to a medical class.

"In refutation of this, I again fearlessly offer the example of Transylvania. Let the comparison be made, and it will be found, that in proportion to the size of its classes, this school has produced, since the date of its establishment, a greater number of surgeons, qualified to operate with respectability and success, than any other in the United States.

Should any one choose to cavil and find fault with this representation and pronounce it vain-glorious. as being uttered by a Professor of Transylvania University, let him enjoy his fancied triumph, in the conceit that he has detected me proclaiming my own praises. But, to the enlightened and ingenious, in whose estimation I am ambitious to stand well, it is permitted me to say, that I claim to *myself* no credit for the surgical instruction so abundantly imparted in this institution. *The honor of that belongs to another.*"

"Why should not the pupils of this institution be accomplished in surgery? The public instruction they receive by lecture is unsurpassed; and it will be found, on computation, that, for the last four or five years, the professor of that branch has performed before his class as many important surgical operations, as have been exhibited, during the same period, to any class in the United States. From the reports that have been communicated to me from other schools, I conscientiously believe that he has performed more. But be this as it may, it can be easily made appear, that by far the ablest and most successful young surgeons, that have settled in the valley of the Mississippi, since the year 1820, have been educated in Transylvania."

tice. The act separating them from school, would cut off their ability to acquire knowledge. Whereas, if they had been taught rightly in the first instance, they would carry with them the art of acquiring knowledge, whenever they felt a wish to do so. Thus, the student, who might be in doubt in regard to the pronunciation of a word, could in any moment, in his own retreat, ascertain exactly the most approved pronunciation, equally well, as if he were in a college. And the student also of Botany, could with his dictionary unaided and alone, find the names of any plant he might not know, almost with the same facility, as a school boy could find the correct pronunciation of a word by the aid of a pronouncing dictionary. But in both cases, the right and proper use of both dictionaries should be first taught. In other words the art of acquiring knowledge. This art is too much neglected in medical schools—and consequently, the new made doctors get bewildered when they get beyond the sound of their professors voice. They may have their books with them, but they have never been taught the right use of books, and can learn as little from them, as a student of Botany can learn from his Botanical dictionary, when thrown upon the island of Cuba, with nothing but his book to instruct him in regard to the new vegetable world, (new to him,) which there breaks upon his view. Rafinesque of Transylvania, taught me very little Botany, but he taught me the art of learning Botany whenever I wished to do so. Lately, I was more impressed than ever with the value of that knowledge. In England, France, Switzerland, Germany and Italy, I could always find some one, at hand, ready to tell me anything I did not know in regard to the vegetable productions of those countries, but when I left Europe, returned home, and went to the West India Islands, I could not find persons always at my elbow to tell me the names of the vast field of new plants, which opened to my view, and then, for the first time, I began duly to appreciate the value of the art of acquiring Botanical knowledge, long before taught me by Rafinesque of Transylvania."

J

REVIEWS.

Clinical Lectures delivered during the sessions of 1834–5 *and* 1836–7. *By* Robert J. Graves, M. D., M. R. I. A., *Professor of the Institutes of Medicine, in the school of Physic, Trinity College, Dublin, &c. &c.*

These lectures have been already several years before the public, and as they do not seem to have attracted that attention, from western and southern physicians, to which we believe they are entitled, we design presenting our readers with a brief notice of them, in the hope that we may be instrumental in inducing those that desire practical knowledge to seek a better acquaintance with them than they have hitherto enjoyed, or than we shall be able to give in this review. They contain a very large amount of important practical information, and should therefore, be in the hands of every physician. They cannot fail to be very useful to all classes of the profession, and we regret, that they have not been presented to the American public in a more accessible form, than in the valuable Medical Library, of Professor Dunglison: that publication, containing the only edition of them, with which we are acquainted.

It would be impossible, within the limits of a review, to touch upon all the topics which the author has discussed in his lectures:—we shall not, therefore, attempt it. Attention will be particularly directed to such subjects only as, we suppose, will be interesting to our readers. Nor have we been very choice in the selection of them—indeed, they have been taken very much at random, as it would be very difficult, amidst such a multiplicity of valuable suggestions, to determine which to take or which to reject.

In the treatment of inflammations, Dr. Graves has great confidence in the Nitrate of Potash and Tartar Emetic, as the reader will perceive from the following quotation:

"You are aware that nitrate of potash in large doses is a powerful antiphlogistic, and you have seen it prescribed with excellent effects in cases of acute arthritis treated in this hospital. Nitrate of potash, when given to the amount of two or three drachms in the day, combined with two or three grains of tartar emetic, is, next to bleeding, the most efficient means we possess of reducing inflammatory action; and were I to be asked what remedies I should employ in combating inflamma-

tion—supposing there were no such things as the lancet, or leeches, or calomel—I should certainly say nitrate of potash and tartar emetic."

St. John Long's liniment acquired great celebrity in Great Britain, and the following are some of the anecdotes told of its wonderful powers.

"You know it has been asserted that St. John Long's liniment never reddened the skin, except over the exact spot where the disease was situated. I was assured by a young lady who used this liniment, that she rubbed it all over the chest, and that it produced no discoloration of skin, except in two spots where she felt pain. She at first mentioned but one spot which was painful, but St. John Long, having applied the liniment himself, told her she had deceived him, and that there was pain in another spot. It had other effects equally miraculous. An eminent Dublin lawyer declared that it drew nearly a pint of water from his head, and Lord Ingestre testified that it extracted quicksilver from his brain."

We here subjoin what is considered an imitation of St. John Long's liniment, which Dr. G. was in the habit of applying, and from which he derived much advantage as a rubefacient in chronic inflammations of the chest. Strong acetic acid, half an ounce; spirits of turpentine, three ounces; rose water, two ounces and a half; essential oil of lemons a few drops, and yolk of egg, in sufficient quantity to suspend the turpentine.

"This liniment is an imitation of the celebrated liniment of St. John Long. I gave a bottle of the real liniment to Dr. Apjohn, to analyse, and he thinks it consists of acetic acid, spirit of turpentine, and two animal matters, one containing azote, the other not; the latter probably some species of fat, probably goose-grease. Now this fat did not exist in St. John Long's liniment in the form of soap, it was evidently some kind of fatty matter blended with water, probably by means of trituration with yolk of egg. The active ingredients are spirits of turpentine and strong acetic acid. This liniment should be applied by means of a sponge. It acts as a rubefacient, and generally induces an eruption of small pimples after a few applications. The spirit of turpentine must be well mixed with the water (which ought to be added to it gradually) by means of yolk of egg, before the acetic acid is added."

This liniment I have repeatedly used in chronic bronchitis, and in several varieties of chronic cough with very great advantage. It should be applied to the whole superficies of the chest, and where it is desirable to keep up a gentle, but protracted glow upon the surface, I know of no application that answers so well, or is so agreeable to the patient. It may be persevered in for any length of time, without the slightest inconvenience or pain. It is extremely difficult to obtain vinegar, in this country, sufficiently strong, I have therefore, to increase its rubefacient power, augmented the

quantity of turpentine. Dr. Stokes speaks of it in the most complimentary terms. He says:

"I have been for some time in the habit of employing a mode of treatment which I can recommend strongly, not only in this disease, but even in confirmed phthisis. It consists in sponging a large surface of the chest daily with a liniment composed of the spirit of turpentine and acetic acid, so as to keep out an erythematous state of the skin; and I do not know a more easily manageable or efficacious remedy. From numerous observations, I have concluded that this liniment not only acts beneficially, by its counter-irritating properties, but that the ingredients are absorbed by the surface, so as to act on the mucous membrane as direct stimuli. My reasons for this opinion are, that I have seen it to produce effects of the most favourable description, even when but little redness of the surface was produced; the relief being much more than could have been expected from the mere amount of counter-irritation. In several cases, too, the secretion of the kidneys has been increased."

Dr. G. is much in the habit of giving a combination of opium and tartar emetic, for the purpose of calming nervous irritation, and procuring sleep in the advanced stages of fever, and with the happiest results; results indeed, which have rarely been produced by any remedy when there has been weak and rapid pulse, tremulous tongue, great tympanitis, excessive prostration of strength, subsultus tendinum, extreme nervous agitation, constant muttering, low delirium, and total sleeplessness; circumstances in which, it is said, the articles above mentioned, proved perfectly successful. The following is his prescription and mode of using it:

"R. Antimonii tartarizate grana quatuor, tinct. opii. drachmam, misturæ camphoræ eight ounces. Of this mixture, a tablespoonful to be taken every second hour."

This combination we used twelve years ago in a very protracted case of typhoid fever, which terminated successfully, and we are under the impression that we were indebted to Dr. G. for it.—Since that time we have no recollection of having prescribed it until about three years ago, when Dr. Graves' Clinical Lectures, first made their appearance in this country. Within that period we have used it repeatedly, and although it procured sleep, and moderated nervous irritation, we have never seen the prompt improvement from it of which he speaks. Nor are we inclined to believe that with a combination of symptoms, so unfavourable as those above enumerated, it or any other combination, would prove generally successful. Such lesions will have taken place as to render the tendency to death almost irresistible.

Dr. G's. observations on the nature and treatment of hoarsness, or loss of voice, from soar throat, or laryngeal inflammation are valuable and we commend them to the attention of the practitioner.

"A form of hoarseness is frequently observed in growing boys or girls, which assumes a very chronic character, and often resists for a long time almost every form of treatment. A boy gets cold, followed by a soar throat and feverish symptoms, which may last for a few days and then disappear under the use of aperient medicines, or perhaps without any interference on the part of the parents or the physician.—The feverishness and scarness of throat subside, but the hoarsness remains, and the boy can speak only in whispers. This condition may last for weeks and even months, without any other symptom whatever; the patient has no cough or difficulty of breathing; his appetite is good, sleep and digestion natural, and there is no appearance of emaciation. The only thing amiss with him is the impairment of voice, and this continues so long that it gives rise to a considerable degree of anxiety on the part of his parents. When you examine the fauces, you find no appearance of inflammation in the mucous membrane, and there is no superficial or deep-seated tenderness in the region of the larynx. How are you to treat this form of disease? It depends on a relaxed and weakened state of the chordæ vocales, and perhaps the muscles of the larynx—the result of inflammation of an exceedingly chronic character—and will not be benefited by leeches, or antiphlogistics, or low diet. The best thing you can do in such a case is to have recourse to the use of strong stimulant gargles. You begin with a drachm of the tincture of capsicum in six ounces of decoction of bark, which is to be used five or six times a day. After some time you can increase the quantity of tincture of capsicum, but you never need go farther than half an ounce in a six ounce mixture. In the next place, you will have recourse to frictions over the region of the larynx and external fauces with croton oil, which is much better adapted for such cases than tartar emetic ointment. The eruption produced by tartar emetic ointment is productive of a great deal of annoyance, and when the pustules break they prevent the boy from wearing his neckcloth. All the purposes of a counter-irritant are quite as well fulfilled by croton oil, and with much less inconvenience. The best form for using it is the following:—

℞. Liniment: comphoræ comp. one ounce,
Olei crotonis tiglii, M. xx.

Of this mixture a small qnantity—say a couple of drachms—should be poured into a saucer, and rubbed over the fore part of the neck night and morning, until a full crop of pimples appears. When these have dried up and desquamated, it should be again applied, and in this way a mild and manageable, but very effectual degree of counter-irritation can be kept up for any length of time. In addition to these measures (should the disease continue,) I would strongly recommend small doses of iodine, and change of air. I have been induced to give iodine in such cases from observing that inflammation of a chronic character seems to have many points of resemblance to that which arises from scrofula. The last thing which I have to observe on this form of

hoarseness is, that you should, particularly in the beginning, insist on the observance of strict silence—a point which is said to be exceedingly hard to be attained where the patient happens to be a female. In some cases all these means fail, and then something more energetic must be attempted. The inhalation of the vapour arising from tincture of iodine and tincture of conium, added to hot water in a proper apparatus, has proved useful to some; but in all obstinate cases the sheet anchor is mercury exhibited internally, and by means of inhaling the fumes of hydrargyrum cum cretâ. In general, it is necessary to continue the mercurials until the mouth is slightly touched, when the hoarseness will be found to yield. It is obvious, that before we employ mercury in a case of chronic hoarseness, we must feel well assured that we have not to deal with a hoarseness arising from a phthisical tendency, for in this case mercury would prove injurious to the constitution.—In such cases the stethoscope and percussion often afford valuable assistance, by showing that although the patient has had a hoarseness and cough for weeks, or even months, yet there are no symptoms of tubercular developement in the lungs. The cough is only the result of laryngeal inflammation or irritation; the submaxillary glands and the amygdalæ are often slightly enlarged, the fauces are red, and the back of the pharynx is covered with irregular superficial excoriations.—Connected with the subject of sore throat is the discovery lately announced by Velpeau, of the use of alum in powder in acute cynanche tonsillaris. He states that this powder, applied by means of the finger to the fauces and inflamed parts, exercises a wonderful effect. The symptoms, says Velpeau, are stopped as if by enchantment, the fever diminishes, the redness and tumefaction of the inflamed parts subside the appetite returns, and convalescence is speedily established. This application is successful at any period before suppuration has been established. Alum has long since been applied in substance to the throat, in cases of angina maligna, and in chronic sore throat; but, before Velpeau, no practitioner ever dreamed of making use of alum as a local application during the first stages of acute cynanche tonsillaris. By the way, this use of alum is calculated to throw some light on the good effects which this substance exerts, when taken in large doses, in cases of violent pain in the stomach arising from indigestion, recommended by Dr. Griffin, of Limmerick."

The following remarks on the treatment of fever, we trust we shall be excused for recommending to the attentive consideration of those physicians, who think it their bounden duty to keep the system under the constant influence of active medicines. There is no more fatal error prevailing in this country, than that the perturbatory treatment is alone to be relied on. Under this impression the strongest articles, without interruption, are actively persevered in, and generally, to the prejudice, and often to the destruction of the patient. We must learn to confide more in nature and less in ourselves before we shall be able to encounter disease with the success that we should. Hear Dr. G.

"In cases of acute disease of any considerable duration, and especially in private practice, there are periods when medicines of an expectant and temporising character must be employed, and hence the introduction of a class of remedies extensively used in fever and other complaints, and generally denominated palliatives. These are remedies which have a general tendency to assuage thirst, act as diluents, gently promote the secretions of the skin, intestinal canal, or kidneys, and which are known to possess, at least the negative quality of doing no harm. They are most commonly prescribed in combination with a considerable quantity of fluid, and hence are administered in the form of draught or mixture. The medicine in most general use among the physicians of Dublin is one which was introduced by Dr. Cheyne. It is prepared by dissolving a drachm of carbonate of ammonia in three ounces and a half of water, with as much lemon juice as will saturate it; the mixture is then sweetened with orange peel, and given in doses of two tablespoonfuls every third or fourth hour. In this way a solution of the citrate of ammonia is formed which possesses the properties of a mild anti-febrile, and gently stimulant diaphoretic.

"Now it cannot be denied that this mixture answers the purposes of an expectant remedy, calculated to pass away the time, and do no injury; but it appears to labour under one considerable disadvantage, it is not agreeable to the taste. If you taste the citrate or acetate of ammonia, you will find that its flavour is by no means pleasant, and I need not tell you that in cases where there is no actual indication to be fulfilled, it is of importance to have something that will not be disagreeable to the patient. Feeling, therefore, the necessity of altering this prescription, I have lately introduced another, which I am happy to find has been extensively adopted, and which is formed by substituting the carbonate of soda for the carbonate of ammonia. The mode in which I generally employ it is the following:—carbonate of soda, a drachm; water, four ounces; lemon juice, a sufficient quantity to saturate the alkali; syrup of orange peel, half an ounce; tincture of orange peel, two drachms.—A little more than an ounce of lemon juice, will be sufficient to saturate this quantity of carbonate of soda, whereas, it would take from two and a half to three ounces to saturate the same quantity of carbonate of ammonia. If you wish to have a weaker solution, and I believe it is the better way, you can dissolve a drachm of carbonate of soda in five ounces of water instead of four. Nothing can be more agreeable in flavour than this mixture. The citrate of soda which is formed, does not, it is true, exert any active influence on the animal economy, but it partakes in the properties of neutral salts, determines gently to the kidneys, tends to keep up a soluble state of the bowels, and forms a most grateful and refreshing beverage. The syrup of orange peel gives the mixture an extremely pleasant flavour, and this is further heightened by the agreeable aromatic bitter of the tincture. Since I commenced using it, I have found it to answer all the necessary purposes extremely well and I can recommend it to you with confidence."

So unsuccessful was the treatment of fever at one time in Ireland "that an able and honest man declared" in a phamplet that the treatment of fever was nothing but a farce, and that as many per-

sons were killed by one form of treatment as another," and says Dr. G.

"This appalling announcement of the truth met the public eye, and it was further confirmed by observing that the poor, particularly those located in remote country districts, who had little or no medical attendance, died in much fewer numbers than the rich, who lived in towns or in their vicinity, and who had every attention paid them which professional skill could devise. Various explanations of this dreadful fact were given; and among the hallucinations of the day was the statement, that a poor wretched being, who lived on bad food, who ate nothing but potatoes and milk, or probably salt, and who was addicted to habits of intoxication, was better calculated to bear fever than the man who lived well and led a regular life. The truth, however, is, that the rich were killed by the *nimia diligenti medicorum*, and the poor, who had nothing to look to, (to use a quaint expression of Dr. Rutty) but the providence of God, escaped."

Several years ago, a family of negroes was severely afflicted with typhoid fever. Seven or eight died, and but one recovered. The physician purged with activity, and his patients slipped thro' his fingers with alarming rapidity. The one, however, that recovered was a fellow of observation, for seeing how ineffectual the treatment adopted was, he determined by a *ruse*, to try what nature would do for him. Pills were at regular intervals given to him, and as regularly he put them in his mouth, but the moment the back of his nurse was turned, he took them out and placed them under his pillow, and when he was declared out of danger, he triumphantly produced a handful of pills, which had like to have had the credit of curing him.

I had been the physician of a lady, in very delicate health, for several months, before I set out for Europe, in 1834. She was much improved but not cured. When I returned, eighteen months afterwards, she was in other hands, and in the estimation of all, in a fair way to terminate her earthly career. Though her stomach and bowels were labouring under chronic irritation, she was treated with purgatives, and under the full belief that, as she did not improve, the treatment was not pushed with sufficient activity, they determined to augment the doses, until the end in view should be accomplished. They reached at last sixteen of what are called, *par excellance*, Cooke's pills per diem, without making any progress further than to convince the lady that she must die. Not however, disheartened, they were for persevering, but the good sense or despair of the patient revolted—she would take no more pills, and from that moment she commenced recovering and now enjoys tolerable health.

We wish now to call the attention of the reader to the subject of diet in the treatment of fever. The strict abstinence, which it is customary to enforce in febrile affections, has been productive of very evil consequences, and of this truth we were satisfied long before we saw the clinical lectures of Dr. Graves. Indeed, we have for the last seven years inveighed with earnestness against the system of starvation, which is too generally practised in the management of fever, not only in the Western country, but throughout the world. Very early in practice, we were taught by repeated disaster, how perfectly nugatory it is to rely on the carbonate of ammonia, camphor, spirits, etc. in the typhoid stage of fever. We soon learned to prognosticate death in every case when it had reached the period, in which such remedies were supposed to be indicated. They were almost uniformly unsuccessful, and when an individual happened to recover under their use, we were by no means satisfied that they were entitled to the credit of the cure. Indeed, we do not believe there are remedies, for any disease, that will more frequently disappoint the practitioner than those that have been mentioned, in the typhoid stage of fever. This, the practitioner soon learns, but the unpracticed physician relies upon the statements that are made in books, in regard to their efficacy, and he is sure to be disappointed. We are told in books on practice and therapeutics, that they are valuable—much to be confided in—that they are generally successful, etc., when there is not one word of such statements that is true, or that has been deduced from actual observation. When they say that they are generally successful, they mean, I suppose that one in ten or twenty recovers, and this is the utmost! If they do, and this is more success than I have derived from them, it would be more sensible and nearer the truth to say that they do not always kill, and when a patient recovers under their use, it is because his constitution has triumphed over both the fever and the treatment. I have, therefore, for years abandoned them as worse than useless.

About the time that experience had convinced me that no reliance could be placed on tonics and stimulants in the treatment of the typhoid stage of fever, Prof. Cooke's Pathology and Therapeutics reached Alabama, where I lived several years, and in that book, I was told that the active enforcement of cathartics had divested the typhoid stage of fever of all its dangers. To this course

I with alacrity resorted, but a brief experience satisfied me, that it was more disastrous than that which consists in the use of tonics and stimulants. Though we are told by the author, that cathartics arrest hæmorrhage from the bowels, when it occurs in fever, we were soon satisfied, that no plan of treatment is so well calculated to precipitate that event. We therefore, abandoned it, and having no other resource, we determined to leave the disease almost entirely to the efforts of nature. Nor had we pursued this course, long before we were convinced of its infinite superiority over every other plan of treatment that we had hitherto followed. We repeatedly saw patients gradually emerge from circumstances of danger out of which they had rarely if ever come upon any plan of active medication that we had seen practiced. The most that was done, after patients reached the typhoid stage, was to feed them with caution, and although we cannot say this plan was generally successful, it was so much more successful than any other plan of treatment that we had adopted, that we are willing to endorse all that Dr. G. has said against starving patients in fever, which we here subjoin:

"Having made these few general observations on the steps to be taken by those who enter on the treatment of typhus, I shall now proceed to speak of diet and medicines. In a disease like fever, which lasts frequently for fourteen, twenty-one, or more days, the consideration of diet and nutriment is a matter of importance, and I am persuaded that this is a point on which much error has prevailed. I am convinced that the starving system has, in many instances, been carried to a dangerous excess, and that many persons have fallen victims to prolonged abstinence in fever. This was one of the errors which sprung from the doctrines of those who maintained that fever depended on general or topical inflammation. They supposed that fever arose from inflammation, and immediately concluded that, to treat it successfully, it was necessary to reduce the system by depletion and low diet, and to keep it at this point during the whole course of the disease. Hence the strict regimen—the *diete absolue*—of the disciples of the physiological school, and of those who looked on inflammation as the essence of fever. The more the symptoms appeared indicative of inflammatory action, the more rigorous was the abstinence enforced. If a patient's face was flushed, or his eyes suffused, no matter what the stage of the fever was, they said, "here is inflammation of the brain, and nourishment will exasperate it." If he had red or dry tongue, and abdominal tenderness, they immediately inferred the existence of gastro-enteritis, and all kinds of food, even the lightest, were strictly forbidden. That this proceeds from false notions on the nature of fever is beyond doubt, and I pointed out this fact many years ago, long before the appearance of Piorry's work. Let us, in the first place, ex-

amine the results of protracted abstinence in the healthy state of the system. Take a healthy person and deprive him of food, and what is the consequence? First, hunger, which after some time goes away, and then returns again. After two or three days, the sensation assumes a morbid character, and, instead of being a simple feeling of want and a desire for food, it becomes a disordered craving, attended with dragging pain in the stomach, burning thirst, and some time afterwards epigastric tenderness, fever, and delirium. Here we have the supervention of gastric disease, and inflammation of the brain, as the results of protracted starvation. Now, these are in themselves very singular facts, and well deserving of being held in memory. Read the accounts of those who perished from starvation after the wreck of the Medusa and the Alceste, and you will be struck with the horrible consequences of protracted hunger. You will find that most of the unhappy sufferers were raging maniacs, and exhibited symptoms of violent cerebral irritation. Now, in a patient labouring under the effects of fever and protracted abstinence—whose sensibilities are blunted, and whose functions are deranged—it is not at all improbable that such a person, perhaps also suffering from delirium or stupor, will not call for food, though requiring it; and that if you do not press it on him, and give it as medicine, symptoms like those which arise from starvation in the healthy subject may supervene, and you may have gastro-enteric inflammation, or cerebral disease, as the consequence of protracted abstinence. You may, perhaps, think that it is unnecessary to give food, as the patient appears to have no appetite, and does not care for it. You might as well think of allowing the urine to accumulate in the bladder, because the patient feels no desire to pass it. You are called on to interfere where the sensibility is impaired, and the natural appetite is dormant; and you are not to permit your patient to encounter the horrible consequences of inanition, because he does not ask for nutriment. I never do so. After the third or fourth day of fever, I always prescribe mild nourishment, and this is steadily and perseveringly continued through the whole course of the disease."

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"At my last lecture I endeavoured to impress upon you the fact that there can be no doubt that persons have been occasionally starved to death in fever; and laid before you some remarkable facts connected with the influence of protracted abstinence on the general system, as well as on the brain and digestive tube. I endeavoured to show that long-continued denial or want of food generates symptoms bearing a very close resemblance to those which are observed in the worst forms of typhus. Pain of the stomach, epigastric tenderness, thirst, vomiting, determination of blood to the brain, suffusion of the eyes, headache, sleeplessness, and, finally, furious delirium, are the symptoms of protracted abstinence: and to these we may add, tendency to putrefaction of the animal tissues, chiefly shown by the spontaneous occurrence of gangrene of the lungs. It has been shown by M. Guislain, physician to the hospital for the insane, at Gnad, that in many instances gangrene of the lungs has occurred in insane patients who have obstinately refused to take food. Out of thirteen patients who died of inanition, nine had gangrene of the lungs. You perceive, then, that starvation

may give rise to symptoms of gastric disease, to symptoms of cerebral derangement, and to mortification of the pulmonary tissue. It is not, therefore, wrong to suppose that when a system of rigorous abstinence has been observed in fever, and when food has been too long withheld, because, forsooth, the patient does not call for it, and because his natural sensibilities are blunted and impaired—it is not, I say, unreasonable to suppose that gastric, cerebral, and even pulmonary symptoms may supervene, analogous to those which result from actual starvation.

"An attentive consideration of the foregoing arguments has led me, in the treatment of long fevers, to adopt the advice of a country physician of great shrewdness, who advised me never to let my patients die of starvation. If I have more success than others in the treatment of fever, I think it is owing in a great degree to the adoption of this advice. I must however observe, that great discrimination is required in the choice of food. Although you will not let your patients starve, do not fall into the opposite extreme: you must take care not to overload the stomach. When this is done, gastro-enteric irritation, tympanitis, inflammation, and exasperated febrile action, are the consequences. I have witnessed many instances of the danger of repletion in febrile diseases. A case of this kind occurred some time back in this hospital, in a boy who was recovering from peritonitis. In another case, in private practice, an incautious indulgence in the use of animal food was followed by a fatal result. A young lady ate some beefsteak, contrary to my orders, at an early period of convalescence from fever, relapsed almost immediately, and died in thirty-six hours. Food must be given with great care and judgment, particularly in the beginning of fever. For the first three or four days, particularly if the patient is young and robust, water, weak barley water, and whey will be sufficient. After this I am in the habit of beginning with some mild nutriment. What I generally give is some well boiled gruel, made of groats, and flavoured, if there be no tendency to diarrhœa, with sugar and a small quantity of lemon juice. The ordinary oatmeal gruel does not answer sufficiently well for this purpose, for it is apt to produce griping and diarrhœa, symptoms which are extremely disagreeable in the commencement of fever, and which often lead to others of a more troublesome and formidable character. I am also much in the habit of giving a little thin panade, morning and evening, during the latter part of the first, and the beginning of the middle stage of fever. A small slice of bread is slightly toasted, and boiling water is poured on a tablespoonful of the crumbs, in sufficient quantity to make a thin panado, of which the patient takes a tablespoonful two or three times a day. It may be flavoured with a very small quantity of lemon juice and sugar, if there is no tendency to diarrhœa; but where this exists, or where you are administering mercurials, I think you should be cautious in the use of acids. Although medical men are of late rather less cautious in giving acids during the use of mercurials, I think the practice is not entirely devoid of danger, and I think our predecessors were right in withholding them under such circumstances. You will begin, then, on the third, fourth, or fifth day, according to circumstances, with a little gruel; and after two or three days you may add a little panado,

giving, as I have already observed, a spoonful of either every third hour. As the fever advances you may add some mild animal jelly or broth; and one of the best kinds of nutriment in the middle and latter stages of fever, is chicken broth. I do not speak here of chicken water; I mean good and well made chicken broth. Give this, but give it in small quantities, and with great caution at first. Watch the effects of the few first spoonfuls; it may act injuriously, and you should give it up, at least for some time, if it produces any bad effects. If it brings on heaviness, sickness of stomach, flushing of the face, excitement of pulse, and increased feverishness, give it up, and return for some time to the gruel and panado. You can try it again in a day or two; for although your patient does not bear it to-day, he may to-morrow or the day after; and it is a most fortunate circumstance when it agrees with him, for, as I have already observed, it is the best kind of nutriment you can give in the middle and latter stages of fever. The best mode of giving it is to make the patient take a tablespoonful of it regularly every third hour, or oftener if necessary.

"Recollecting the tendency to diarrhœa and intestinal irritation in fever, you will be extremely cautious in allowing your patient the use of fruits. Indulging patients in the use of grapes and oranges is a very popular, but, in my mind, very hazardous and improper custom. I have on many occasions seen persons injured by fruits of this description. Stewed and roasted apples are still more dangerous; they are apt to produce tormina, flatulence, diarrhœa, and intestinal inflammation. All acid or raw fruits have a tendency to produce irritation of the stomach and bowels, and should be avoided altogether, or very sparingly used."

* * * * * * * *

"At our last meeting I spoke of the use of food and drink, and laid before you my views of the most appropriate articles of diet in the various stages of fever. I told you that I attributed much importance to the use of a proper regimen, and that I looked upon the observance of this principle as a main cause of success in the treatment of typhus. I think it is chiefly owing to our care in this respect, that so few of our patients have tympanites. Now and then we have cases of fever with tympanites and diarrhœa, but in the majority of instances, these are persons who have been under treatment before admission, and who have *been too much purged.* The use of drastic purgatives in the early and middle stages of typhus, is one of most fertile sources of subsequent evil, and there are few evils of greater magnitude than tympanites with diarrhœa, and gastro-enteric inflammation, particularly in the latter stage of fever. Now, if you enquire into the history of the cases in which these symptoms are most distinctly marked, you will find that in at least two-thirds, powerful catharitics have been employed, not once, but repeatedly, in the commencement of the disease. Almost all cases, in which calomel and colocynth, or aloes, followed by black draught, have been liberally used in the commencement, become tympanitic, frequently at a very early period. The same mischief, but in a less degree, is apt to occur where a system of strict abstinence has been enforced, and continued undeviatingly for a considerable length of time. Want of food, even in the healthy state of the system, is apt

to produce flatulence, weakness, and distension of stomach, and in many instances gives rise to very serious forms of gastro-intestinal irritation. The *diete absolue* is very apt to produce the same effect in fever."

Some cases of fever, in which there is determination to the head, accompanied by intense headache, restlessless, and delirium, Dr. G. admits, are relieved by cold applications, but that there are others, which are much more benefitted by fomenting the head with water, as hot as it can be borne. He says:

"The idea of employing hot fomentations in cases of this description was first communicated to me in 1833, by Mr. Swift, who became accidentally aware of their value while washing his face one day in very warm water, at a moment when labouring under severe headache. The sudden relief obtained by the application of hot water, induced him to try it extensively in the headache of influenza, and with the most satisfactory results. You are aware, that in the influenza which appeared in this country in 1833 one of the most remarkable symptoms was intense headache. This was accompanied with great debility, and was not amenable to the ordinary modes of depletion. Now, Mr. Swift found that by applying water, as hot as it could be borne, to the forehead, temples, and back of the head, great and almost instaneous relief was obtained, and that in this way he was able to keep a most unpleasant symptom in check, while he was taking measures to remove the disease. I afterwards heard from my friend, Dr. Oppenheim, of Hamburg, that he had also discovered that this was the best means of affording relief under the same circumstances. This led me to think of applying hot fomentations to the head in other diseases, and although I cannot give you any particular rules for determining the cases in which you should employ them, I can say that you will generally find warm vinegar and water the best and most efficacious application in the ordinary headache of fever."

In another place speaking of the superiority of hot water over blisters in influenza, he says:

"Fomenting the trachea and chest with very hot water appears to be much more serviceable. This has proved extremely valuable in many cases of this as well as other affections of the air-passages; and on referring to the late American journals, I find that the plan of treating croup in its onset, by means of very hot water applied with a sponge to the throat—a plan which I recommended some time ago in the Dublin Medical Journal—has been extensively employed in America, and with the most happy results. Sponging the throat and chest with water, as hot as it can be borne, has been found, in many instances, capable of arresting all the threating symptoms of croup at once. Several cases are mentioned in the American journals, in which the lives of the little patients were evidently saved by this application. I may state, also, that not long since a child was saved in Dublin by the same means. By the advice of Mr. Smyly, who suspected the threatened attack, the child's mother had every thing prepared, and by

her promptitude and care arrested the disease before it had sufficient time to form."

The practice recommended in the several diseases just mentioned, has been followed by Professor Dudley, for many years, and with, as he says, great success. Indeed so satisfied is he of the superior efficacy of hot to cold water, in almost every case, in which either is commended, that he uniformly prefers it.

We do not wish it to be supposed that we have presented illustrations, of all the subjects of practical interest to be found in the Clinical Lectures of Dr. Graves; such was not our aim, and had it been, we could have found material for comment, and generally speaking for commendation, on almost every page. Our purpose was merely to present a few specimens of the practical character of his lectures, and these we have taken very much at random, not so much with the wish to satisfy the reader, as to stimulate his curiosity to see more of so valuable a volume. Indeed, it should be in the hands of every practitioner, for we know of few works, from which he will derive more imformation that will be serviceable to him in the discharge of his multifarious duties.

We had nearly finished this incomplete analysis, before we were informed that our friend, Dr. W. W. Gerhard, had presented the American public with an edition of the Clinical Lectures of Professor Graves. At this, from what has been said in a foregoing part of this article, we are very much gratified. That able physician, in the midst of his various important engagements, could not have performed, a more acceptable service to those practitioners of medicine who are desirous to become acquainted with sound pathological views, and valuable practical suggestions. But the editor has not been satisfied with merely furnishing an American edition of the work referred to, he has added to it, fifteen clinical lectures of his own, together with many notes, which have much increased the value of it to the American physician. We, therefore, proceed to speak as briefly of those lectures as their nature and and importance will admit.

[TO BE CONTINUED.]

A report of the facts and circumstances relating to a case of Compound Fracture, and prosecution for Mal-Practice, in which WILLIAM SMITH *was plaintiff, and Drs.* GOODYEAR *and* HYDE *were defendants, at Cortland Village, Cortland co. N. Y. March,* 1841. *Comprising statements of the case by several medical gentlemen, together with notes and comments on the testimony. By* A. B. SHIPMAN, M. D.

Disputes amongst professional men often take place at the bedside of disease, that are no less scandalous than they are ridiculous. The pretext is commonly a difference of opinion. But this cause is less frequently the ground of quarrel than self-love, which biases the judgment and self-interest, which corrupts the heart. It is because candor, the love of truth and of mankind—a deep and abiding sense of the solemnly responsible duties that devolve upon the physician are not sufficiently constant in thought, feeling or action. If the profession and the public were not the chief sufferers from such conduct, we would not dignify or encourage it by a notice:—if those who engage in angry crimination and recrimination without adequate cause were reproved by the neglect and contempt of the public as they should be, they would generally cease to act thus, and the few whose unamiability or want of principle should induce them to persevere, would disgrace themselves, but not the profession, of which they are unworthy members.

There is no feature in the conduct of physicians so well calculated to impair the respectability, and to diminish the usefulness of the healing art, as their indomitable disposition to slander and denunciate. Those angry and bitter jealousies which daily grow up amongst them—those violent and perturbing controversies which agitate society and disgrace the profession should never go unrebuked. It is a matter of great surprise that those, who suffer their minds to be actuated by a hostile and contumacious spirit, are so blinded by passion, as not to see the inevitable tendency of their conduct. They should observe that every fresh feud only serves to sink the profession lower and lower in public respect, and diminishes more and more the confidence of sensible men in the skill and knowledge of those who practice it. Nor is it necessary that we should go far in search of illustration and proof of the truth of this grave accusation. In a neighbouring city, for the last twenty-five years, the demon of discord has reigned triumphant.

During that long period, hostile factions have waged against each

other a war of exterminating bitterness. In that unfortunate city, fierce and rancorous animosity has kindled the flame of deep resentment in every breast, and the public ear has been so long and so incessently plied with the language of vindictive vituperation, that now, so far from listening to or feeling an interest in the broils which almost every day arise, it turns away in disgust. This has inflicted incalculable injury upon the respectability of the profession; for it has so prejudiced and poisoned the public mind, that believing, as it does, toomuch of what physicians say of one another, it does not look upon them as fit associates of respectable gentlemen. Indeed if one tithe of what they say of one another were true, it would be wonderful if the public thought otherwise. In consequence of this, the profession commands no respect, and those who practice it have lost caste. A conviction of this, however, has not extinguished or abated the spirit of discord, they still persevere and like a house on fire which gathars fuel from the downfall of the fabric, their controversies wax warmer and warmer.

We are sorry to see that our brethern of the Empire State seem to be infected with the evil spirit of which we have been speaking, and we are sorry to find that, so slight a cause as a difference of opinion in regard to the treatment of a fracture, should have given rise to so much commotion as seems to be indicated by the publication of Dr. Shipman. It appears that on the 4th of July, 1839, a man by the name of Smith, fell from a building and fractured his leg just above the ancle. Both bones were broken, and the tibia protruded through the soft parts, thus rendering the injury compound. The bones were placed in apposition, and dressed by Dr. S. and the patient was sent the next day to the alms house, where he received the attention of Drs. Goodyear and Hyde.—After the patient entered the alms house, Dr. S. heard nothing more of him until the 13th, when he was sent for to assist in the amputation of his leg. The limb was at that time in the following condition:

"His leg lay over the double inclined plane; the bone protruding through the wound nearly two inches: it was dry and dark, and had lost its vitality—the foot was turned off and the leg distorted, with retraction of the muscles and shortening of the limb—the leg was swollen and inflamed nearly to the knee; the wound gaped, but there was no loss of substance; upper part of the wound had healed, and healthy granulations covered a portion of the bone—some

pus of good quality issued from beneath the bone. The patient suffered much pain, yet was free from fever; appetite, strength, and pulse good, tongue clean and bowels regular."

Here was a difference of opinion in regard to the propriety of amputation. Drs. Goodyear and Hyde, were decidedly in favor of its immediate performance, while Dr. S. and others, were as much opposed to it. As Dr. S. has given a very brief but complete summary of the circumstances which authorize amputation, we shall quote it *in extenso*, for the benefit of the reader, as being worthy of consideration independently of the interest it presents in regard to the point at issue, between the contending parties. In opposition to the operation Dr. S. urged:

"That there were three periods of time at which this operation may be proper. The first is immediately after the receipt of the injury, before swelling, inflammation, or a disposition to gangrene has taken place; that if the soft parts are extensively contused and lacerated, the principal blood vessels and nerves destroyed, so much so, that we have good reason to fear that there is not enough left to carry on the circulation of the blood; the bones broken and comminuted, or important joints involved in the mischief, then it becomes a matter of serious consideration whether the attempt to save the limb will not in all probability be followed by the death of the patient. That the second period is when, after a great length of time the bones refuse to unite; the sore instead of assuming a healthy granulating surface, take on a spongy and unhealthy aspect secreting a large quantity of thin sanious matter; the patient looses his appetite and strength; hectic fever with a weak quick irritable pulse—he becomes pale and emaciated, colliquitive sweats and diarrhœa reduce him to the lowest state of existence: then it becomes the duty of the surgeon to perform amputation, as the only means of saving his patient's life. The third period is one which does not require much deliberation. It is when a limb instead of suppurating and granulating kindly, manifests a gangrenous disposition ending in complete mortification, involving the whole member, skin, muscles, cellular tissue and tendons quite down to the bone, and all circulation is totally cut off below the part injured. A patient in this situation must either loose his limb by the spontaneous efforts of nature, or by the hand of the surgeon."

Dr. S. insisted that the case of Smith, did not fall within either of the preceding categories, remarking:

"The first period had passed over, and I had decided that an attempt should be made to save the limb, and had reduced and dressed it accordingly—that the second period would not apply, as there was no hectic fever, diarrhœa, or night sweats which demanded a removal of the limb: on the contrary the patient retained his strength and appetite, and appeared in no danger of sinking from

the local cause; and that the third rule would not apply at all, as gangrene had not, nor was there any probability that it would take place. I advised the removal of the dead portion of bone with the saw, which offered an obstacle to the reduction of the fracture placing the bones in apposition, and applying appropriate dressings; that it was important that the fractured ends of the fibula were placed in apposition, that it might unite, which would serve to keep the limb steady until union of the other bone had taken place—to give such constitutional remedies as the case required, and I was confident the leg might be saved without endangering the life of the patient. That amputation at this time was dangerous and cruel, that his chance of living was infinitely greater without amputation than with, that to save the limb it would require a great deal of time and patience, but that should not be taken into account where the life or limb was at hazard."

Taking it for granted that the above is a correct statement of the case, I think it must be conceded, that Dr. S. was correct in his desire to make an attempt to save the limb. His reasoning, however, did not satisfy those who were for amputation, and as the patient was unwilling to loose his leg, he was put, at his request, under the care of Dr. S. and others on the 22d, ten days after the consultation. At this time the condition of the patient was nearly the same as on the 13th. The bone still protruded through the soft parts, and about an inch of it was removed in order to place the fractured ends in apposition. After this the wound went on happily, and in the spring he left the alms house with a strong leg, and could walk without difficulty, or much lameness.

From all that can be discovered from the published report of the trial which was instituted by Smith against Drs. Goodyear and Hyde for damages, it would appear that Dr. S. and his professional friends were entitled to much credit for saving the leg, yet, it seems they were objects of much misrepresentation and abuse.—Dr. S. shows that he has taken much trouble in the examination of surgical authorities in support of the position which he assumed and the mode of practice which he adopted, and has proved to the satisfaction of the candid and impartial, that he was guided by the soundest rules of modern surgery. We abstain from casting any reproach upon those who differed in opinion with Dr. S. further than to express our regret, that medical men are not sufficiently indulgent to one another.

MONTHLY PERISCOPE.

Secale Cornutum.—In a recent essay, by Th. Wardleworth, of England, on the Parturient Properties of the Secale Cornutum, some information, valuable to obstetricians, is to be found. Much difference of opinion exists in regard to the powers of this article —some think it should supercede the use of instruments;—others, that it is dangerous to the child;—others, that it is destructive to both mother and child—and others, that it is perfectly inert, having no action whatever upon the uterus. In this state of uncertainty, the testimony of observing practical men must be considered valuable. In a communication to Mr. Wardleworth the following flattering statement is made:

"Out of 357 cases, of head presentation, in which I have administered the Ergot of Rye, in every stage of parturition, in all states of dilatation of the os uteri, and in many instances of the first child, I never had the slightest reason to regret its exhibition, or believed that it had acted injuriously on the mother or the child, except in two cases. In those cases in which it produced no effect, (being, however, very rare, when properly administered;) or, the effect having subsided without accelerating the delivery, yet I invariably found the labour to progress, or otherwise, as if no interference had been attempted. The children were born alive and vigorous, except where evident signs existed of their having been dead in utero for some time previous to the commencement of the parturient efforts; or where it had been deemed necessary for the safety of the mother, to have recourse to embryotomy, from a contracted or deformed pelvis."

By Mr. W. himself the ergot has been employed in 1500 cases 'with the most satisfactory results.' 'He says that it is not only the most powerful and safe partus accelerator, but that it is also a powerful dilator of the os uteri':

"In most cases a very short period elapses after the first dose before pain is referred to the pubic region, striking from thence to the back; the pains are slight at their commencement, and recur every two or three minutes, gradually increasing in strength and frequency till the os uteri is dilated to the size of a crown piece; the pains after this gradually decline and frequently altogether subside: when this happens the influence of the first dose may be considered as having passed, affording important information; first, that the influence of the medicine is of a limited duration; secondly, that the gradual manner in which the ac-

tion advances to its full strength and then as gradually abates, is a safeguard in preventing a rupture of the uterus, and in lessening the tendency to hæmorrage; the slight action at first, prepares the uterus for what follows. The pains having nearly ceased, the patient is in a fit state for a second dose which should be stronger than the first, but not exceeding one drachm, (we have in many cases given two scruples with success,) which renews the action of the uterus, and the child is in a short time expelled."

Mr. W. considers the ergot highly serviceable in other cases than those of natural labor. He has used it in cases of premature labor—in uterine hæmorrhage, in presentations of the placenta, attended with deficient uterine action, and in descents of the umbilical cord, with the most encouraging results. Mr. W. considers the powder as the only efficient preparation of ergot, and as the diversified results which have been obtained from this article, have doubtless been owing, in a great measure, to its quality, we here subjoin Mr. Wardleword's method of determining whether or not its powers may be depended upon.

"If an infusion of the powdered Ergot be made, and kept covered for a few seconds, on removing the cover should the infnsion have assumed a deep pink color, and the whole of the Ergot having settled to the bottom of the vessel, its powers, as a parturifacient, may then be depended upon. But should the infusion appear milky, and mucilaginous, with portions of the Ergot floating upon the surface, partly soluble, and partly insoluable; if, under such circumstances as these, the Ergot be administered, its effects are seldom if ever produced."

Dentistry.—Mr. Waite, who, it is said, is an accomplished dentist, recently published "An appeal to Parliament, the Medical Profession, and the Public, on the present state of Dental Surgery," in which the following piquant anecdotes, which, I trust, will be of service to those, who are always ready to throw open their mouths to every itinerant dentist that falls in their way are to be found:

"It would not be inappropriate here to quote a ludicorous scene which occurred a few days since at one of our public offices, shewing the present degraded state of this branch of the medical profession.

'*Magistrate.*—Then after he made three sets of teeth, which were of no use, he persuaded you to go to Mr.——, whose pupil he said he was?

Complainant.—He did.

Mag.—Did you go?

Com.—Yes.

Mag.—What did he say?

Com.—That for a hundred guineas more, he would make me a set of teeth with which I could eat beefsteaks, and which would last me my life. (*Loud laughter.*)

Mag.—Did you pay him the money?

Com.—Yes.

Mag.—Have you a receipt?

Com.—No. I asked for one, but he would not give it me, and I have called on him without being able to see him.'

In another instance I was requested by my friend Dr. Scott, to give advice where an elderly and helpless lady had been defrauded of an enormous sum for two most clumsy-looking bits of gold, which it was pretended were worked up at Paris, by some extraordinary workmen, which were to be found nowhere else in the world.

Not long since, I was informed that a gentleman received an account of £170, for work done for his family, which was not worth £10, and which enormous sum was compromised for £100.

A lady, caught by the advertisement of a man calling himself the first operator of the day, and other high-sounding titles, stating that no one in the world but himself knew anything of the art, was compelled to seek redress in a court of law; the verdict was against her, but in the trial it came out that a model was made of her mouth before the teeth were extracted, therefore, how could the work answer. If any dentist of respectability had been subpœned on this trial, the verdict would have been different. We find governesses and servants who have saved money are too often duped by these men, and in many instances they are left wholly destitute.

I refer only to cases which have come within my own knowledge.

The system is not confined to London. Near Oxford, a dentist persuaded a poor groom, who had just received £8. for wages, that unless his teeth were cleaned and some extracted, he would lose his life. He sent him home *minus* the £8. His master is an intimate friend of mine."

Musk in Pneumonia.—It frequently happens, in certain constitutions, that repeated losses of blood produce effects, that could not have been anticipated *apriori.* This is an increase of the excitability of the vascular system, which has been described as prostration with excitement. If any cause of febrile excitement should exist at the same time, there will be a fallacious degree of strength and frequency of the hearts action, that may lead to the further evacuation of blood, which is certain to prove dangerous. Now, this excitable state of the circulation seems evidently owing to the impression made upon the nervous system, by diminishing pressure upon the brain. This view is illustrated by what happens in pneumonia and other inflammatory diseases, when the detraction of blood has been carried to excess. Patients under such circumstances often become delirious With the delirium there are other indications of reaction from exhaustion. When this is the case, it is clear that the use of evacuants should be suspended, and heretofore, physicians

have not been able to decide upon what other course to pursue; but we are now gratified to learn, that the most satisfactory results may be expected from large doses of musk. Recamier and Roache of Paris, have given this article repeated trials, with the most gratifying results. We subjoin an abridged report of a case, in illustration, from the Medico-Chirurgical Review.

"A man, 54 years of age, was seized with all the symptoms of severe pneumonia, on the 20th April, 1840: he was bled profusely from the arm, and for the next two days he was much relieved. A state of great restlessness and of mental incoherence supervened, and the urine was passed involuntarily. Leeches were applied to the head, sinapisms to the calves of the legs, and repeated doses of antimony were administered. But no relief was derived from these remedies: the pulse at this time was frequent, small and compressible. A grain of musk was ordered to be given every hour; and soon the patient fell into a tranquil sleep. The somnolence continued for nearly twenty-four hours, and then the patient awoke much refreshed, but not at all aware of what had occurred during the last few days. The musk was continued in less frequent doses, and in the course of a day or two he was fairly convalescent. About two scruples of musk had been taken in the course of three days."—*Gazette Medicale.*

Under the head of "Gleanings" we find the following statements in the New York Medical Gazette:

"From some experiments of M. Langenback, it appears that cancer can be transmitted from man to the lower animals. He injected cancerous matter into the veins of a dog, and cancerous tubercles were developed in the lungs of the animal."

"M. Tribili asserts, that light exercises such an influence over the spasms of hydrophobia, that persons affected with that disease, can swallow liquids in the dark." [*'Good news, if true!'*]

"A case is given, in a late number of Casper's Wochenschrift, of a woman, who, for six years after the birth of her first child, never having been pregnant, had her menses regular, and at each monthiy return, the breasts swelled, became hot, irritable, and tender, and secreted more or less milk. Some days before the re-occurrence of menstruation, the breasts again diminished, and the secretioh of the milk ceased."

"A remarkable case of death, from irritation, is reported in one of the eastern papers; it resulted from using the same razor with which a dead person had been shaved- We recollect, that some years since, a gentleman of this city suffered for a long time with a severe inflammation of the face, caused, as was supposed, by being shaved with a foul razor, at a barber's-shop; a warning to every man to do his own shaving."

"Thos. Williamson, M. D., of Edinburgh, speaks in high terms of common soap as a local application to burns, especially if superficial; it is to be applied with a soft brush, in the form of lather, and has, at least, the recommendation of being at once accessible and easily used."

Professor Bartlett's "*Introductory Lecture on the objects and nature of Medical Science, delivered in the Hall of the Medical Department of Transylvania University,*" *has been published at the request of the Medical Class.* To that lecture we refer the friends of the Medical School of Transylvania, for a full assurance that the more immediate guardians of the Institntion still continue to be mindful of its interests. The style of the address is plain and dignified but not ostentatious—and its views are such as must meet with the entire approbation of all those who prefer practical truths to systematic assumptions—the advancement of the science in the career of actual improvement, to the idle and absurd schemes of speculative philosphy, which, if they do not retard the progress of medicine, leave it where they found it. We therefore, commend its manner and matter to the attentive consideration of the profession at large.

Medical School of Transylvania.—We take this opportunity to assure our friends that the present medical class is nearly as large as the most numerous class (which was 281 in 1825–26,) that ever assembled in the city of Lexington.

To Correspondents.—The editor would be pleased to receive for publication, short practical articles, from physicians of observation and reflection.

TO THE MEDICAL PUBLIC.

The encouragement already received by the Western and Southern Medical Recorder, has been more flattering than was expected. As payment is required in advance, we direct attention to the terms of publication, which may be seen by a reference to the inside of the cover, and to the subjoined facilities for the transmission of money to the editor.

☞ By the regulations of the Post Office Department, every facility in this respect, that could be desired, is offered. Post Masters are allowed to forward, under their frank, letters written by themselves, containing money to pay the subscription of third parties to any periodical. To render the performance of this act of courtesy less burthensome, the letter should be prepared for the Post Master's signature, by the person wishing to avail himself of the privilege. If this is done, the favor will be rarely denied by any Post Master.

The notes of solvent banks, in the state in which the subscriber lives will be received by the editor, without discount.

THE

WESTERN AND SOUTHERN MEDICAL RECORDER.

EDITED BY JAMES CONQUEST CROSS, M. D.

Professor of the Institutes of Medicine and Medical Jurisprudence in Transylvania University, and late Professor of Materia Medica and Therapeutics in the Medical College of Ohio.

No. 3. LEXINGTON, KY. JANUARY, 1842. Vol. 1.

Cholera Infantum, as it appeared in Missouri, in 1838. *By* Dr. John H. Blue, *Chariton, Mo.*

During the first two years of my residence in this State, there were but few cases of Cholera Infantum that came under my observation; they were sporadic cases merely, and had little in them that deserved particular notice.

But the past summer was one of unusual sickness throughout the country. Epidemics were more severe than they had been known for several years, and the Cholera Infantum in particular was alarming. It is seldom that this scourge of the cities and desolator of the nursery has made such ravages among the sparsely populated regions of the West. But it is altogether probable that it will continue again and again to visit us; and it cannot be, but that a few remarks on it, and its appearance amongst us, will be acceptable to the medical profession, especially as almost every notice on the subject is drawn from the practice of the eastern cities.

The first cases of Cholera Infantum, which made their appearance amongst us, were not very well marked, and occurred in the latter part of July. They were generally ascribed to teething, gross diet, or some mismanagement in nursing; and yielded in my hands, readily, to the proper regimen and treatment. The cases began to increase in frequency and obstinacy, but did not create serious alarm in the community, nor in my own mind, till within a

short time, I heard of six or eight deaths amongst children, one after another, around me, some under medical treatment, and some without any professional attendance at all. This led me to a more careful observation of the cases committed to my charge; and it was my good fortune not to lose a case in which I was in attendance, and had the management to myself. I say this in the humble hope that my success may merit attention, and that my method of treatment may prove beneficial to others in time to come.

It is not necessary to enumerate all the particular symptoms which others have attached to the summer complaint of children—writers may be consulted for that purpose. I shall only note those symptoms which struck me forcibly as a practical observer.—Some cases commenced with puking as the prominent symptom—this derangement of the stomach could often be traced to the eating of indigestible food, as the exciting cause; but the stomach soon became so irritable, that the blandest nourishment was ejected with force. Others commenced with disordered bowels—this was often traced to changes in the atmosphere, teething and worms. The discharges were various in appearance and frequency and character; agreeing only in one prominent feature—the absence of any bilious matter. In some instances the stools were very frequent and watery: and the children wasted away almost as in Cholera Asiatica. In other instances the stools were slimy and tinged with blood. And in others, again, the ingesta passed rapidly through the intestinal canal, and were discharged with little or no appearance of digestive change. The urine, in a case or two that I noticed, had a milky, coagulable appearance on cooling. The countenance underwent a remarkable change, and soon became haggard; and the eyes glassy, an expression of anguish, and sunken, with a dingy color beneath them. The extremities were below the natural temperature, while the region of the stomach and the abdomen in general were preternaturally hot. There was great thirst—it was insatiable, and any kind of drink only increased the puking or purging. But in the exacerbations of the consecutive fever, cold sponging had a very soothing effect. The *nasal trait* of M. JADELOT, extending from the alænasi in a semicircle to the outer line of the orbicularis oris, was particularly noticeable. The lips were shrivelled, and the skin became shrunken and furfuracious during the progress of the disease. The brain did not seem much affected—there was a great deal of inquietude, but it

seemed the result of intestinal anguish, not of cerebral disorder.

In the treatment of this complaint, if called during the initial symptoms, as I frequently was, after the alarm became general, I paid the most scrupulous attention to the diet and the condition of the child; I gave little or no medicine. If the child was yet unweaned, it was confined strictly to the mother's milk, at unfrequent intervals, and in small quantities;—if it was weaned, it was restricted to a like spare quantity of fresh milk, diluted one third with warm water, and sweetened with loaf sugar—in a few cases, coffee or thickened milk was substituted in its place. The childs gums were examined—if they were swollen, I lanced them. The extremities were kept warm by bathing, frictions and flannels, and generally flannels next the skin over the whole body; and the little patient was kept as quiet and composed, as its circumstances would allow.

Where the symptoms had become fully formed, additional means had to be resorted to. General warm salt water bathing seemed to quiet the painful symptoms, and to restore, in some measure, the healthy state of the skin; but it was only temporary, and on the whole, did not meet my expectations. Emollient poultices, made a little stimulating by the addition of ground mustard seed, and kept to the abdomen seemed to answer a better purpose. In quieting the stomach, no means succeeded so well in my practice, as warm salt water injections, a teaspoonful or so of table salt, to four ounces of water, and repeated again and again until the vomiting ceased. If afterwards the purging continued troublesome, in the few cases in which I tried it, an injection of a grain of acetate of lead and ¼ grain of opium, or its equivalent of laudanum, in a table spoonful or two of slippery elm water, arrested the discharges admirably.

In removing the disease generally, however, I found it necessary to resort to means that would restore the hepatic secretion—for until this was restored and carried off naturally, there was a constant liability to a recurrence of the symptoms. But I gave very little medicine. I adopted the almost infinite simal doses of calomel recommended by DEWEES and others—exhibited them in a very little thick slippery elm mucilage, the mucilage collected around the strips of the bark, macerated in water, and repeated the doses every hour until bile appeared in the discharges. They seem-

ed to have a very quieting influence on the stomach, and after repeating them some time, if they did not produce a motion of the bowels, they were aided by the salt water injections.

Having established a healthy biliary action, if the bowels were still teazed with frequent diarrhœal discharges, I resorted to small doses of acetate of lead, opium and Ipecac; say,

R Acetate of Lead, 1 grain,
Pulverised Opium,
" Ipecach. a a. ¼ grain.

mixed and divided into 4 powders for a child twelve months old, and one of them given every two hours in the slippery elm mucilage till the diarrhœa was arrested—in urgent cases, a powder after every discharge until the same purpose was accomplished. When the circumstances, or any thing in particular forbid the powders being taken, or retained in the stomach, I combined three of them, and gave them in a tablespoonful or two of slippery elm mucilage, with a syringe. I have learned to place a great deal of dependence in this prescription, in diarrheal and dysentaric complaints, after the bowels have been unloaded, and the excitement of the system somewhat subdued. I seldom saw any cerebral or other symptoms to forbid the opium, and the evident relief which it produced from the abdominal pain, seemed to indicate it. The Ipecac is anti-dysenteric, and its utility in subduing gastro-enteric affections, has long been known and taught in the profession. As to the acetate of lead we have all witnessed its soothing external influence, and its importance in the suppression of all inordinate discharges when taken internally. It was of great use to me in the Cholera Infantum, and though I have anxiously watched, I have never noticed any bad consequences result from its use in the above combination and practice. And the prescription of acetate of lead opium and ipecac, modified and adapted to the various circumstances of the cases committed to my charge, has been in my practice invaluable—almost a *sine qua non.* I always laid it by as soon as I had accomplished my purposes with it, and commenced it at intervals of hours or days again, as symptoms might demand.

Several cases passed over the stage of immediate danger, and then assumed the character of an irregular chronic diarrhœa. The system in these cases seemed exhausted, and the digestive organs incapable of recovering their healthy action by the efforts of nature, though the simplest articles of diet were prescribed. In these

cases I found the sulphate of quinine combined in the slippery elm mucilage, three or four times a day, act as Dr. SAPPINGTON says of his pills, "more like a charm than a medicine."

There was occasionally a tendency, after a few days, to an irregular remittent fever which yielded to the cautious use of Calomel and Ipecac, and the plentiful use of slippery elm water as a drink.

There was one case in which vomiting was the prominent symptom, and the bowels afterwards became obstinately costive.—Neither the minute doses of calomel nor the salt water injections acting, I resorted to a prescription of DEWEES—the carb. soda. After giving one grain of it every hour, for 8 hours, it brought on copious evacuations.

As to vegetable astringents, which some practitioners have extolled very highly, I think they were generally pernicious. I used a combination of Kino, Calc. Magnesia and Laudanum, in one case, with apparent temporary advantage; but I afterwards used it, and saw other vegetable astringents used, where I believe they were prejudicial; and nothing would tempt me again, under similar circumstances, to give up my own plan for the use of any vegetable astringent.

I believe that there is great danger of too much dosing in this disease, and cannot but think that several fatal cases which came under my observation, were aggravated by the quantity and the quality of the medicines used. In my own practice, in one obstinate case, where, for a good while, I was goading the liver with calomel, I am convinced that I should have calomelized my patient to death, had I not abandoned the practice, and changed the prescription.

Facts and Reflections in regard to Cholera Infantum. By the EDITOR.

The article of Dr. BLUE on Cholera Infantum, will abundantly reward an attentive perusal, and we should not have thought it necessary to add a single word on the subjeet, had he not omitted the consideration of one or two points, because, perhaps, his object was special and not general, which we deem of some interest, and had we not desired to speak of a mode of treatment, in some respects, different from that which he has commended.

The prominent features of Cholera Infantum, are vomiting, and

the frequent passage from the bowels of liquid stools, showing a manifiest deficiency, if not a total absence, of bile. Now what is the cause of this inordinate and perverted activity of the alimentary tube, as well as of the peculiar character of the alvine evacuations? To this enquiry, although but little very satisfactory information has been derived from the examination of the pathological lesions after death, it does not appear difficult to respond.

In the first place, there is a nearly in all, and an entirely complete destitution of bile in the liquid evacuations that come from the bowels, in very many cases. This can result from a diminished vitiated or suspended hepatic action only. Now, in what state has the liver been found in fatal cases of Cholera Infantum? Dr. Stuart recorded a fatal case in which "the liver was of its usual proportions, but of uncommonly dark color; the gall cyst much distended with a pale semi-fluid matter, somewhat resembling the albumen of an egg, in which a small portion of the vitellum had been intimately diffused." Dr. JACKSON, of Boston, who appears to have paid as much attention to this subject as almost any other pathologist, says: "The liver has sometimes been found very large, so as to occupy two-fifths of that cavity, but this viscus has not presented any other mark of disease, unless, indeed, it may, in one or two cases, have been rather more firm and solid, than natural. The gall bladder has not had any peculiar appearances. It has been found distended and flaccid, with dark green bile, and also with bile which was much more pale than natural, comparatively colorless." In the few dissections which Dr. CONDIE made, the vessels of the liver were unduly distended with blood. We have made five dissections of children who died of this disease, and in every instance the vena protarum, and the veins that return the blood from the bowels and stomach were strongly engorged. In only two instances was there a decided enlargement of the liver—in the others it did not appear to vary, perceptibly, from the usual size. The gall-bladder in one case, contained scarcely a perceptible quantity of fluid; in two others, there was about two drachms of a yellowish secretion, and in the remaining two a larger quantity of a fluid that was nearly colorless. The consistence of the liver we could not discover had undergone any material alteration.

Between the skin and the liver there is a close connexion. As a general rule the activity of the one implies activity of the other. When the skin acts the liver is never torpid and vice versa. Chol-

era Infantum prevails most extensively during the hot months, at which time the skin is stimulated to over exertion. This exposes perspiration to the danger of sudden suppression, and that too from causes so slight, that under more favorable circumstances they would produce no injurious effect. Excessive excitement of the skin is, of itself, sufficient, in feeble persons, independently of any other cause, to induce that organ to fall into a torpid state.—With the change in cuticular action, there comes, with great certainty, decided alterations of the functions of the liver. The secretion of bile will be diminished, vitiated or suspended.

All the secretions are formed from the blood in vessels of capillary magnitude. The organic powers employed in their production are also a cause of the motion of the blood in the capillaries.—This is a physiological assumption, susceptible of the clearest proof and most abundant illustration. We cannot, however, pause for the present, to make this allegation good. Being a cause of the motion of the blood in the capillaries, when those organic powers, which produce the secretions are enfeebled or rendered torpid, the circulation in the capillaries must become languid and embarrassed, and then engorgement to a greater or less extent results.

In Cholera Infantum this uniformly happens. The liver ceasing to form from the blood its proper secretion, the circulation through the capillary system of that organ (and it is as much entitled to be considered a distinct one as that of the lungs) becomes impaired, and congestion soon follows. The tributary veins of the vena portarum must participate, and that immediately, in the morbid condition of the liver, in consequence of which the bowels and the mucus membrane lining them in particular, become congested. This produces irritation in the intestinal canal, and as a necessary consequence an increased determination of blood there. The first effect of the determination of blood to a part, is to augment the quantity and to alter the quality of the secretions peculiar to it. Thus serum and mucus are poured in morbid abundance into the bowels, and the watery, slimy and mucus evacuations which pass with such frequency, are explained. It is only by augmenting the intestinal secretions that cathartics increase the peristaltic action of the bowels. Unless they do this, they cannot purge. Thus, I presume, the vomiting and purging so distressing and exhausting in Cholera Infantum, are fairly referable to an increased determination of blood to the alimentary canal, which has resulted from congestion of the liver.

But what is the pathological condition of the gastro-intestinal mucus membrane? Does it correspond with, and authorize this view of the subject? Of this, we do not think there can be a reasonable doubt. It is stated by Dr. JACKSON that "in every case, marks of disease have been discovered on the mucus membrane. In the stomach there have been usually observed one or two small spots of irregular shape, in which the mucous membrane was red, inclining a little purple." In the duoclenum there have been invariably found one or more spots, much larger than in the stomach, in which the mucus membrane has been considerably inflamed, and for the most part swollen." In other parts of the small intestines, other such inflamed portions of the same membrane have been seen, varying in size." In one case he found in the large intestines, numerous small ulcerations. In the few dissections made by Dr. CONDIE, the vessels of the liver, stomach, and intestines were found "unduly distended with blood, traces of inflammation occasionally presented themselves on the internal coats of the latter organs, and, in one or two, when the disease had continued for some time before death, ulceration, and even adhesion of the lining membrane of the stomach and bowels was discovered." In the dissections of several other physicians, morbid appearances of various kinds were discovered in the intestinal mucus membrane, but those refered to, are sufficient for the purposes of this article, simply adding the results of personal observation. In the five fatal cases to which allusion has been made, patches of a dark red or brown color, from the size of a five to a ten cent piece, were scattered, at various distances, throughout the ileum and jejunum, but particularly in the latter, and more numerously in the coecal half of it, than any where else. In three of the cases irregular injectted patches were seen in the stomach near its pylor ic extremity These cases occurred many years ago, and were examined under very unfavorable circumstances. The details given of them, therefore, are not so full as they should be, in order, to prove satisfactory, or to be of much importance in determining the pathological state of the bowels in Cholera Infantum.

From the appearances that have been discovered on dissection it would seem that inflammation, to a greater or less extent, actually exists in the mucus membrane of the bowels. But should we regard every discoloration of that tissue as evidence of inflammation? The spots observed are often of a purple, dark red or

brownish color, and if found in those parts that were the most dependent during the last hours of life, it is evident that it would not be safe to rely upon them, as certain indications of inflammation.—The softening of the membrane at the spots that exhibit a morbid appearance, is a much more sure evidence of inflammation than any discoloration, whatever may be its character. This has been remarked by Dr. GROSS, but it was in the chronic form of the disease; his observations, therefore, are of but little utility or importance in enabling us to determine the precise state of the gastro-intestinal mucus membrane, at an early period.

By some physicians, and those in particular, who have most recently directed attention to the subject, the opinion is entertained, that it is in the mucus membrane of the alimentary canal, that those lesions are to be found, on which Cholera Infantum depends. This view of the disease we are not inclined to adopt. There is no evidence, not even presumptive, that at its commencement, the alimentary mucus membrane is in any other than a state of congestion; and this state results from a previous alteration of the functions of the liver. Congestion, we know, passes readily into inflammation, and that this may and frequently does happen in the disease under consideration when injudiciously treated, or when so violent as to resist treatment, there can be no doubt. It is important, however, not to confound the condition of the alimentary canal at the commencement with that which is disclosed at the termination of fatal cases. Such an error would inevitably lead to very indiscreet practice.

Although indubitable signs of inflammation are found after fatal Cholera Infantum, they are often very slight, bearing no proportion to the intensity of the symptoms—they are various in character, corresponding with no regularity to the particular symptoms, and are frequently entirely inadequate to explain the fatal event. In fatal cases of inflammation of the bowels, unconnected with Cholera Infantum, we always find much more extensive lesions than in this disease. This being the case, it would be hardly reasonable to hold the few discolored spots, which are frequently nothing more than indications of congestion, as sufficient to account for death.

Nor is there less difficulty in explaining the chief peculiarities of the symptoms, than the fatal event, by referring them to mucus inflammation of the bowels. How shall we explain the destitution

of bile in the alvine evacuations on the supposition that the disease consists in gastro-intestinal inflammation. This does not happen in pure mucus inflammation. Or, why should the restoration of healthy hepatic secretion be so indispensable to the cure of Cholera Infantum, if this opinion is correct? Calomel is the article upon which reliance is almost universally placed, in the treatment of this disease, but it is not regarded as particularly efficacious in subduing mucus inflammation of the bowels. If we consider the intestinal lesions as congestive in the first place, and consecutive of hepatic engorgement, we shall have no difficulty in under standing the characteristic symptoms—their order of developement and the proper mode of treatment.

[TO BE CONTINUED.]

Thoughts on Uterine Hæmorrhage. By D. L. PRICE, M. D. *of Fayette co. Ky.*

Of the numerous diseases to which females, in particular, are liable there is no one that so immediately calls upon the physician for speedy action in order to avert danger as Uterine Hæmorrhage. So sudden is its appearance and so alarming are its consequences, if not promptly arrested, that the physician is not allowed time to consult authorities, but must act instantaneously and save his patient with the stock of knowledge he has on hand, or lose her through ignorance and inability to manage cases of such pressing emergency.

Hence, this disease, more perhaps than any other dangerous condition, requires that the physician should accurately observe, and make himself acquainted with the means provided by nature to counteract its evil tendency. This, however, is a study to which physicians, in too many instances, are not much inclined. They prefer the comparatively easy task of embracing a system, and acting in accordance with its arrogant assumptions, which has rarely failed to retard rather than accelerate the progress of the science, to the assiduous study of morbid phenomena and the therapeutical action of those expedients, which are resorted to, for the purpose of counteracting their dangerous tendency.

Inasmuch as this article is designed as nothing more than a brief consideration of a few points, which I regard as of importance in

relation to Uterine Hæmorrhage, it will not be expected, nor indeed is it necessary, that I should enumerate in detail the various causes by which it is produced. Nor am I disposed to adopt or to speak, in detail, of any of the systematic modes of treating it. Having studied nature and understanding, as I trust, the canses upon which it is invariably dependent, I shall shape my preventive and corrective means in accordance with it. From my observations on this subject, flooding always results from the inability or unwillingness of the uterus to exert its tonic contraction. This leaves so many veins of considerable size in an open and patulous state, that blood is lost with such rapidity, as, in a very short time, not only very much to exhaust the powers of life, but, in some cases, to extinguish them altogether.

The symptoms are palpable and cannot be unperceived or misinterpreted. The pulse becomes exceedingly feeble, thready and rapid—the face is pale—cold clammy perspiration bedews it—the patient sighs—throws her arms about—complains of roaring in her ears—sickness, exhaustion, and often asks those around her what is the matter, as if unconscious of her situation. There is generally much thirst—occasional vomiting and some times spasmodic action of the muscles of the face and trunk—ultimately respiration becomes difficult and laborious—the extremities cold and then death soon follows.

Uterine Hæmorrhage comes on either immediately after the expulsion of the fœtus, or after the placenta has been removed. If it should occur after the expulsion of the fœtus, it is evident that the placenta is partially adherent, and if after the removal of the placenta, it is evident that it has been prematurely interferred with, or in other words, it has been removed before uterine contraction has commenced. This is a very common cause of hæmorrhage, and in my opinion, no means should be used for its extraction before there is satisfactory evidence of contraction, or until *after pains* come on. This I conceive to be the proper line of conduct, whether these take place in a few minutes or are defered for an hour. Sometimes it happens that an hour or more elapses before there is the slightest indication of uterine contraction, and when this occurs the uterus of course is very inert. Indeed the torpidity of the organ is such, in some instances, that the hand may be introduced almost as high as the stomach without awakening the slightest activity in the organ. Under such circumstances the removal of the

placenta is often difficult on account of its firm attachment to the uterus. Indeed the adhesions are sometimes so strong that the cord has not sufficient strength to reovme it, and I have known it to be broken by the violence used by inexperienced accoucheurs. Injudicious efforts of this kind besides exposing the patient to the danger of hæmorrhage, from the detachment of a portion of the placenta, always excites the fears of the patient and renders its ultimate extraction more d fficult.

It has been stated that the cause of hæmorrhage is deficient uterine action, and if this be true it is evident, that those remedies which are calculated to arrest it, must have the effect to make it contract. To answer this object, I know of no article so efficient and certain as Ergot. It has been my custom to give it in drachm doses, and these are repeated at intervals of fifteen or twenty minutes until it is characteristic effects are displayed on the uterus, and this, in cases of emergency, I have been obliged to do several times. My rule is to persevere in its use until my object is accomplished —until the uterus contracts. When this takes place a gently extracting force applied to the cord during every contractile effort of the uterus, will generally be sufficient to effect a removal of the placenta, and this too without causing much pain or exposing the patient to the danger of hæmorrhage. Such precautions also prevent inversion of the uterus, which has frequently happened from indiscreet violence applied to the cord.

As a general rule, therefore, no attempt should be made to remove the placenta until uterine contraction has been excited, either naturally or artificially by the administration of Ergot. This rule of practice should be adhered to with the more pertinacity when the removal of it requires considerable extractive force, for although this may and has been done in some cases with safety, the danger of inversion and hæmorrhage is so great that it should be ventured upon with the utmost caution.

In regard to the hæmorrhage that occurs immediately after the expulsion of the fœtus we are told, by all teachers, that the first thing to which our attention should be directed is the removal of the placenta. With the greatest respect for the opinions of those who give this advice, we must be permitted to remark, that we cannot see any possible good that can result from its removal under circumstances that are decidedly critical. What is the leading indication in uterine hæmorrhage? Doubtless to excite contraction

of the uterus. Will the removal of the placenta accomplish this? No it will not, and in addition more vessels would be opened and consequently the danger of the patient would be increased instead of diminished. Besides it would cause a resort to the remedy, in which confidence may be placed, to be unnecessarily delayed.—These are, therefore, two substantial objections to the practice which has been so generally recommended.

If this view of the subject be correct, no attempt, under the circumstances referred to, should be made to remove the placenta.—Instead of this, firm pressure should be made by an assistant over the region of the uterus, and the physician should have recourse, as speedily as possible, to a drachm of Ergot, a teaspoonful of laudanum in strong whiskey or brandy toddy. The Ergot should be repeated every fifteen or twenty minutes, and the laudanum and spirits occasionally, until uterine contraction is excited. When this is well established, the hæmorrhage will immediately abate and soon cease altogether, and then if it be necessary manual assistance may be given to remove the placenta without any apprehension of those consequences to which allusion has been made.

The modus operandi of the remedies above recommended is not difficult of explanation. The action of the Ergot is specifically directed to the uterus, the contraction of which it excites, and the vessels are thus closed from which the blood issues, while the laudanum in the large doses above recommended, acts as a sedative, and speedily controls the preternatural action of the organs of the circulation.

Certain individuals manifest much opposition to Ergot, alledging that it produces several very injurious effects. This opposition is, I am persuaded, an idle prejudice, calculated to keep up a very unnecessary alarm in the minds of obstetricians. I have used it freely for several years, and although my experience has not been as ample as that of some of those who are hostile to its use, I have seen enough of its effects in actual practice, to satisfy me that it is not only a perfectly safe but an exceedingly potent article. In this opinion I am gratified to find that I am sustained by Prof. Richardson whose extensive experience has made him a competent judge. In the first volume of the *Transylvania Journal of Medicine*, the Professor informs us that he has "in no instance observed it to increase the pulse in force or frequency; that it appears to induce no

change in the condition of the stomach and bowels, nor to alter the sensibilities of other parts of the system; but that it exerts powers over the uterus with as much certainty as tartar emetic excites the stomach to vomiting. On this subject there is a remarkable coincidence of opinion amongst American accoucheurs."

Having for several years used the Ergot as a partus accellerator, in a great many cases, and always with success, it occurred to me that as it hastens delivery by causing the uterus to contract, it would, in all probability, arrest hæmorrhage in the same way. Under this impression I gave eighty grains of it with laudanum and spirits, and to my surprise, in the space of fifteen or twenty minutes the uterus commenced actively to contract, and a violent hæmorrhage was almost immediately arrested. Since then I have used it repeatedly, under similar circumstances, and with perfect success.

Let us now take a brief survey of those remedies that have been recommended in uterine hæmorrhage and endeavour to ascertain how far they are calculated to fulfil the principal indication in it.—The introduction of the hand, which is most strenuously recommended, I consider of very doubtful utility. In the first place it is often ineffectual; and in the second, it produces much irritation, and it is well known that *ubi irritatio ibi fluxus.* From the increased determination of blood to the uterus there must of necessity result an increase in the violence of the hæmorrhage. To resort to doubtful, instead of almost certain expedients is indiscreet policy.

The application of cold water to the abdomen, and of ice to the uterus, I regard as not only useless but occasionally exceedingly injurious. Cold, it is true, may by its astringent action give a slight check to the hæmorrhage, but this is transient only, for reaction must soon ensue, and the vessels having had their power of tonic contraction weakened by the remedy employed, they will not be so able after, as before its application, to resist the force of the circulation; the bleeding will be renewed with increased violence. Besides if cold water and ice are applied to the parts designated prior to the expulsion of the fœtus, the tonic contraction of the uterus will not be excited. As this is true we should, reasoning from analogy, conclude that it will not afterwards, and, as a rule that does not work both ways, cannot be considered a safe ground of action, it should not be confided in.

It is a little remarkable that cold water has been resorted to for the purpose of arresting hæmorrhage, and yet it has never been suggested as a partus accellerator. This is certainly a matter of surprise when we consider, that it is indirectly admitted that whatever promotes uterine contraction will arrest bleeding from the uterus. In this, there is palpable inconsistency, and shows that the confidence so fully expressed by accoucheurs in cold as a remedy for hæmorrhage, rests on an empyrical principle.

As bleeding from the uterus, depends on a torpid state of the uterus, and as it cannot be arrested unless that organ is aroused to contractile exertion, it is evident that if the reputation which cold water enjoys is at all well founded, it is clear that it must be able to cause uterine contraction. This it does not, and cannot do, as I am satisfied not only from personal observation, but from the fact that it is not confided in as an excitor of parturient efforts. Nor would it ever have been so popular in practice, had physicians paid a closer attention to the means provided by nature to remedy the dangers to which she is occasionally exposed, and had they been less subservient to the ridiculous assumptions of systematic writers. In a word, had they studied phenomena more and theories less, many of those notions which are now prevalent would have been, long since, exploded.

I am not disposed to flatter, but to do that justice to those, which others are disposed to deny them. There are those of the Faculty of Transylvania, that present remarkable illustrations of the truth of what I have said. The celebrated DUDLEY has established for himself an enviable distinction, by shaking of the trammels of authority, studying the phenomena of disease and listening to the language of nature, instead of that of books. Professor CROSS deservidly ranks high amongst the foremost of American Physiologists. How has he attained this distinction? By studying phenomena and thinking for himself. His respect for illustrious names is great, but his love for scientific truth is greater. The original turn of his mind, is not only proved by the simplicity and beauty of his opinions in regard to the "Absorbent System and its Functions," but in regard to many other physiological subjects, which he discusses in his lectures.*

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* What is said here of the Editor, must be received *cum grano salis.* The partiality of personal friendship, is more apt to exaggerate than to abate the merits of a favorite.—EDITOR

What I have said of the distinguished individuals, to whom allusion has just been made, is for the purpose of illustrating how much more advantageous it is, to study nature, than the theories and systems of men which obscure rather than enlighten the science.

In further confirmation of the opinion that hæmorrhage results from deficient uterine action—that the excitation of this must be established before it can be arrested, and that this cannot be done so speedily and certainly by any other remedy as by Ergot, I make the following quotations from the writings of Professors MEIGS and RICHARDSON. By the former it is said, that it may be stated as an axiom in obstetrics to which there is scarcely an exception, that a well contracted uterus cannot bleed, and that all obstetricians feel secure when they find that organ hard and of small size. By the latter, we are told that the Ergot, besides possessing the power to cause sufficient uterine contraction to accomplish delivery it produces other valuable effects. It rarely fails to continue uterine contraction sufficiently long after the delivery of the fœtus, to detach and cause the expulsion of the placenta, and thereby to remove those apprehensions in regard to the safety of the patient which are so often well founded. He has repeatedly given a small dose of the Ergot a few minutes before the delivery of the fœtus in order to guard against irregular and deficient uterine contractraction, and thereby to prevent hæmorrhage, and the formation of coagula, as well as to protect the patient from the distressing effects of after pains. He further adds that it is unnecessary to adduce proof in support of the fact, that it is a *partus accellerator*, testimony on this point is conclusive, and goes to establish the fact that in adequate doses its effects are displayed on the uterus with a degree of certainty, which justly entitles it to the appellation of a specific.

From the opinions of the high authorities just alluded to, and they might have been multiplied, in regard to the action of Ergot on the uterus, is it not altogether certain that it is an effectual remedy against hæmorrhage? We are told that a hard or contracted uterus cannot bleed, and it is admitted that no article has so much power in producing that state of the organ as Ergot, and consequently it must be considered superior to every other remedy in uterine hæmorrhege. The correctness of the conclusion, to which this reasoning leads, has been so repeatedly confirmed in my practice

that I rely upon it almost exclusively. In cases of retained placenta Ergot has been given, and it has, under such circumstances, produced such forcible contraction of the uterus as to cause it to be thrown off and expelled, and thus to prevent hæmorrhage. Now, as in doing this the very condition of the uterus is produced, which is necessary to arrest hæmorrhage, is it not strange that the Ergot has not been more generally used and confided in for that purpose in particular? It induces a state of the organ precisely the same as that resorted to by nature to avert impending danger and should, on this ground alone, be preferred to every other expedient. Besides the superiority which it possesses over cold water, ice and stimulating injections, as experience has fully proved, it is acting in conformity to the suggestions of nature, which are never neglected or dispised with impunity.

Report of DOCTOR CAFFE *to the Medical Society of Emulation, upon researches in relation to cervical osteo—myelitis, simulating affections of the respiratory organs. By* DR. MARTIN SCHŒUFELD, *of Charleroy, principal editor of the Annales de Gynecologie et de Pediatrique, etc.**

It is known that the different lesions which affect the anterior part of the vertebral column, with myelitis or not, may put on the livery of all the diseases of the organs that are dependent on the spinal axis. There is, therefore, no pathological condition the diagnosis of which is involved in more difficulty, and no part of pathology has been more unsuccessfully and rarely studied.

At this period the means of exploring the pulmonary organs are so accurate, that we have cases perfectly well drawn up, of many of the diseases by which they are attacked. Still, however, they are subject to many affections, that have escaped the scrutiny of the closest analysis, and a work which should have for its object to embody and make known to us all the morbid states that have been confounded with lesions of the respiratory passages would doubt-

* This article, though not original, and the facts being already condensed in the report of Dr. CAFFE, as much as would be consistent with their great importance, we have determined to insert it in this department of the Journal instead of in either of the others.—ED.

less be very instructive. Indeed the multiplicity of the pathological varieties of the superior respiratory apparatus—the difficulty encountered in distinguishing the phenomena that belong to them from those which depend upon the cervical portion of the diseased spinal axis, authorise us to conclude that, many of the spasmodic diseases of the larynx and pharynx, and even what is called idiopathic asthma are, perhaps, nothing more than cervical myelitis.

The same considerations would lead to the conclusion that certain cures of laryngeal phthisis, to be found in the annals of the science were owing merely to caries of the cervical vertebræ which terminated by eburnification or exfoliation. It is not very uncommon to meet with individuals who complain of expectoration, cough, embarrassed respiration and other symptoms of disease of the lungs, while all the more direct signs are negative. Under such circumstances the practitioner should not limit his examination to the organ that presents the most prominent phenomena, he should interrogate, with the most scrupulous attention, all the neighboring organs, and particularly those that are connected with it by nerves, and he will often discover in them the cause of the derangement of the respiratory function.

The researches on cervical osteo-myelitis, in which Mr. SCHŒNFELD has been engaged, are full of interest. They have for their object to direct attention to that form of disease of which Mr. SCHŒNFELD, whose scientific claims adds interest to the subject, has given the first good monograph.

The numerous authors who have studied cervical osteitis have not sufficiently appreciated the part taken in it by the spinal marrow. However, it has been stated at several epochs, and quite recently, by M. IMBERT, of Lyons, (*Traite theorique et pratique des maladies des femmes*,) that the spinal marrow is not a single organ but a compound of several, each of which has distinct functions.

When we carefully study the physiological influence of the cervical region, we find that the functions of that part of the cord are evidently connected with that of respiration. Indeed, M. OLLIVIER, of Angers, has even pointed out the part of the cord from which this influence is derived.

When the affections of the vertebral column have been described the symptoms that belong particularly to the cervical portion of it, have been too generally overlooked. This deficiency has, however, been in a great degree remedied by the cases of M. SCHŒNFELD.

Cervical osteo-myelitis is not always manifested externally by fistulous openings or abscesses in the region of the neck. The purulent collection may find its way to the anterior surface of the vertebral column and be discharged either by the pharynx or mouth, or by the digestive tube, or into the cavity of the chest.

Cervical osteitis is often attended by some difficulty in swallowing. There is always cough with or without purulent expectoration. The embarrassment of respiration increases with the pressure upon the cervical portion of the column; the voice is altered —there is pricking, numbness or even loss of the sensibility and motion of one or both of the superior extremities; there are vague pains inside or outside of the thorax, in the shoulder, back and neck; the movements of turning, stooping or rising, are difficult and sometimes even impracticable. The deep situation of the diseased part renders the sensible signs almost inappreciable. The precursory and consecutive phenomena of this disease, present all the symptoms that are observed in the various affections of the spinal cord. This circumstance must, therefore, render its study always very difficult.

When you are reminded, gentlemen, that the cervical nerves establish frequent anastomoses with the par vagum--that the pharyngeal and laryngeal nerves send ramifications to the middle and inferior constrictors of the pharynx, to the internal membrane, and to some of the muscles of the larynx, you will find no difficulty in explaining the regularity of the phenomena, that are referable to the pulmonary organ and pharynx. Now in relation to the circulatory reaction, I must remark, that SIR BENJAMIN BRODIE, has proved by experiments on animals and observations on man, that lesions of the upper part of the spinal cord, produce an extraordinary evolution of heat. It reached even as high as 111° Fahrenheit.—These facts are recorded in the *London Medical Gazette.*

Masturbation, which intensely agitates the cerebro-spinal axis, is the most satisfactorily ascertained cause of this disease. It is proper, however, to remark, that there are others that have produced it, such as syphilis, fibrous rheumatism, tubercles, carrying heavy burdens on the head, blows, and traumatic injuries which cause congestion of the cervical region. M. GUERSENT has frequently found cervical caries in scrofulous children.

Cervical osteo-myelitis will be rapid in its progress, in proportion to the nature of the cause that produced it—the intensity of the

disorders of the nervous system, and its proximity to the occiput.

The differential diagnosis is founded upon the negative signs furnished by the organs of respiration. Although the function of respiration is much disturbed, physical exploration is unable to discover any lesion of the pulmonary apparatus. The examination of the throat and the careful palpation of the neck are indispensable. COPELAND suggests the propriety of passing a spung filled with water along the vertebral column. Percussion of the spinous processes and the vertebral groves is necessary. Particular kinds of rheumatism will not be confounded with osteo-myelitis, if it is recollected that rheumatism is very often intermittent, erratic and is not persistent. The prognosis of cervical osteo-myelitis is unfavorable. The chronic form is not easily cured; if, however, there should be no lesion of the cord,resolution, exfoliation and induration may terminate the disease.

The fate of the patient depends upon the correctness of the diagnosis in the commencement of the disease. It is then only that we can energetically assail the seat of it. M. SCHŒNFELD very properly recommends an attentive examination of all affections of of the thorax, that may be complicated with derangement of the respiratory function, in cases, where a precise diagnosis is difficult to make.

We here subjoin two cases that occurred in the practice of M. SCHŒNFELD, in illustration of the preceding remarks.

Case 1st. Cervical osteo-myelitis, simulating laryngo-pharyngeal phthisis.—A woman named Delforge, labourer in a coal mine, aged 36, strong constitution, without what is considered distinct dyscracy, had been for a great number of years subject to sub-acute anginose affections of the œsophagus with symptoms of dyspnœa and heaviness of the head, and numbness of the superior extremities. This inflammation terminated in abscess; but not having observed the patient at those epochs, it would be imposible to fix the seat or determine the character of that termination. In the month of April, 1836, this woman was attacked again with dull, remittent pain in the region of the larynx with a sensation of pricking; respiration was constrained, inspiration slightly painful; more tardily, with these phenomena, there was associated an indefinable sensation in the bottom of the isthmus of the throat, which caused the patient to make frequent efforts at deglutition.

Delforge, believing that the disease that she labored under was

a common angina, of her own accord was bled—leaches at different times were applied, and she employed all the emollient and soothing means which she had used before under similar circumstances.

She had passed some weeks in this state when I was called. Besides the phenomena already mentioned, there existed guttural cough with rejection of purulent sputa; little effort to expectorate, hoarse voice, constrained deglutition, respiration sometimes very painful; the movements of the neck had insensibly become painful, particularly in supination, in the right lateral direction; the tongue was broad, phlogosed, large and difficult to depress; the mucus membrane of the pharynx was of a deep red, and was covered in certain places with a very tenacious mucus; there was emaciation, frequent pulse and manifest symptoms of gastro-intestinal inflammation.

I thought, at first, that I had a case of acute laryngo-pharyngeal phthisis to deal with, but reflecting upon the whole of the symptoms, particularly the difficulty and pain experienced by the patient in moving the head, I was soon satisfied that it was an affection of the cervical vertebræ. What strengthened me in this opinion was having seen on a former occasion a case of cervical osteitis, which simulated laryngeal phthisis. I placed the patient in a strong light, and gave to her head a suitable position; then I forcibly depressed the tongue, and saw, at the most inferior part of the pharynx, towards the right side, two openings, the one immediately above the other, the first had the form of an ordinary pea, the second, with a greater circumferance, was irregular. Although all doubt had been removed as to the existence of caries of one or several of the vertebræ of the neck, and as my examination had been very painful to the patient, I resolved to continue it at another time. On the second visit, I introduced into the larger ulcerated opening of the pharynx a silver probe and distinctly touched the substance of the vertebra.

The patient died twenty five days afterwards, in a state of great exhaustion, and with all the phenomena which are commonly presented in the course of acute laryngo-paryngeal phthisis.

Case 2d. Cervical osteo-myelitis, simulating laryngeal phthisis. The patient, who presented this interesting phenomenon, was seen by several distinguished practitioners of Charleroy. I have been

able to draw up a more complete account of this case, than of the preceding, as I was principal physician to the establishment at which he presented himself.

Here is a summary of the notes which I preserved in regard to this pathological fact.

Kock, a gunner, 45 years of age, entered the military hospital of Charleroy, on the 6th of April, 1829. This man affirmed that he had never suffered from any other venerial complaint than two gonorrhœas, which were cured by soothing treatment; he did not recollect having had any disease of the organs of respiration; he admitted that he had been guilty of excesses in drinking.

For some months, he had felt a dull pain, pressure and constraint in the bottom of the larynx; he experienced a kind of itching (grattemant) which excited cough particularly early in the night, the neck was swelled, the head inclined to the left side; expectoration easy, sometimes mucosities, some times purulentsputa, hoarsness of the voice, transient oppression, slight difficulty in deglutition; the tongue was covered with a yellow coat. The digestive passages, however, still preserved their usual activity; emaciation, slight febrile reaction.

This affection appeared to me to present all the symptomatological characters of a laryngeal phthisis, in its second stage, and I put in use a soothing mixture and frictions on the larynx, with a mercurial and sedative ointment.

The exploration of the chest, however, furnished no unfavorable symptom, and I was not entirely satisfied of the correctness of my diagnosis. The great ease with which he expectorated, the manner in which he carried his head, the tumefaction of the neck caused me to suspect, after several days, the existence of ulceration of the pharynx, and I proceeded to examine that part.

The mucus membrane of the back part of the mouth was of a deep red color, but without any appearance of ulceration; I endeavored to dialate the oesophagean opening, and I discovered at the inferior part of the pharynx, a fistulous orifice of an oblong form, provided with a small tumefied mucus fold from which pus issued.

From this moment, I was certain of the existence of caries of the cervical vertebræ, and I was naturally led to consider this lesion as the source of the sympathetic phenomena which had given the disease the appearance of phthisis of the larynx.

All those means the most earnestly recommended against ulcerations of the bones were used; gargles of every sort and a strengthening regimen were employed; but nothing could arrest the progress of the disease. The symptoms of hectic fever supervened and the patient died at the end of ten weeks, exhibiting, in appearance, all the symptoms of laryngeal phthisis.

Autopsie.—The cartilages of the larynx presented no trait of phlogosis. The organs of the chest presented nothing peculiar, there were no pleuritic adhesions, the pulmonary parenchyma exhibited no trace of hepatization or of tubercles. Tne stomach was contracted, and without any decided mark of phlogosis, the mucus membrane of the small bowels were of a brownish red, and presented near the end of the ileum some superficial ulcerations.

After having removed all the parts situated in front of the cervical vertebræ, there was discovered at the posterior and inferior part of the pharynx, towards the right side of the body of the third vertebra, an oval opening, two lines broad, which communicated with the interior of the vertebral canal.

The anatomico-pathological investigations that were made in regard to the diseased part of the vertebral column are sufficiently important and remarkable, to entitle them to a detailed description.

The cervical portion of the vertebral column viewed in front, was distorted to the left and presented a curvature, the reverse of its natural direction: that is to say, its convexity was observed to be at its posterior, and its concavity at its anterior surface. Having detached all the osseous part of the neck, and removed the soft parts, the atlas and dentatus were observed projecting forwards and pressing upon the other vertebræ; lower down and at the anterior part of the neck, another and larger ulcerated opening was observed, which communicated with the slightly carious bodies of the fourth and fifth vertebræ. This opening was irregnlar, larger on the right side, covered with lamina of very hard cellular tissue and corresponded with the upper one; some small fragments of detached bone could be felt in it. In general the caries of the bodies of the vertebræ was not very considerable; all their left and exterior portions were nearly sound. The osseous affection was more considerable in the interior of the bodies of the three first vertebræ. The articular apophyses, from the second to the sixth vertebra were

in a state of anchylosis; the foramina formed by the juxta-position of the vertebræ were unaltered, with the exception of that of the left side, between the second and third, which was considerably augmented in size. The vertebral canal was curved; the spinous apophyses were in a normal state with the exception of that of the second vertebra, which was pushed upwards on account of the body of the vertebra being pressed forwards and downwards.

The membranes of the spinal cord were very much injected—the medullary substance slightly reddened, but of its natural consistence. The cervical nerves presented nothing remarkable.

The preceding remarks and cases will, I trust, enable the practitioner to understand cervical osteo-myelitis better than before having read them.—*Bulletin Medical Belge.*

A Case of Polypus of the nose which terminated fatally, with the dissection. By ROBERT E. LITTLE, *Student of Medicine.*

In May 1838, —— ———, a strong and robust man, aged about 30 years, discovered a small pendulous tumor situated in the right nostril, without pain, with frequent sneezing, watering of the eyes, and a manifest enlargement during cloudy or damp weather. Little or no alarm was expressed or felt by the patient upon its account, until July following, when because of its sudden and increased growth, he made application for advice to a medical man, by whom he was directed to make use of the powdered root of the sanguinaria canadensis as a snuff. By this means, in a short time, the polypus entirely disappeared.

He remained free from any appearance of disease, until Sept. 1839, at which time it again began to grow, and a second time he sought advice. The gentleman to whom he applied, cut out the polypus with a pair of scissors, assuring him that he need apprehend no danger from its further recurrence.

Notwithstanding this assurance, it again, within two weeks after its removal, made its appearance with increased growth. It soon filled the whole of the right nostril, obstructing the patients breathing, and by its pressure upon the neighboring soft parts, caused their entire absorption. Increasing in size, it

extended itself to the other nostril, which it soon filled: breathing through both nostrils being now prevented, the patient was compelled from necessity to sleep with his mouth wide open: his hearing now became obtuse, from the pressure made upon the mouth of the Eustachian tube: his swallowing so much embarrassed as to be unable to take any solid food into his stomach, and his voice so much altered as not to be recognised even by his friends.

In this situation he remained for about the space of two months when the polypus presented itself externally through the right nostril, dilating it to a very great extent, and much deforming his face. The disease now appeared in the antrum Highmorianum of each side, raising up the malar bones: the nasal bones were separated and the integument covering them much swollen and blackened.—Upon passing the finger into the distended nostril, the vomer was felt being partially carious and disengaged from its cartilage. The soft palate was seen and felt by the finger to be pressed forward by a second polypus in the posterior fauces, though this discovery was not made until the disease had made considerable progress.

The diseased mass now projected down between the lip and sup. maxillary bone, which shewed evidence of decay by the incisor teeth dropping from their sockets. From the external canthus of the left eye (for this was the only portion of either eye which was to be seen) the tears perpetually streamed down upon his cheek, dreadfully excoriating it: the siliva incessantly flowed from his mouth, and at the sametime there was a constant oozing of a black and ill smelling matter from the polypus. He now exhibited a most horrid image of misery and despair: tossing himself about in bed, and seeming to be indifferent about life. He complained of an incessant pain in the frontal region of his head and imagined that the bones of it were about to be torn assunder: he passed sleepless nights, moaning and complaining all the time, and when perchance he did sleep, he was always awakened by some horrible dream of impending danger and with a sense of suffocation. The whole of his upper teeth now dropped out, and all the bones of his face seemed to be in a complete state of decay. At this period frequent and violent hæmorrhage reduced him to such a state of weakness as to be unable to rise from his bed: his lips appeared pale and

bloodless, and his extremities of icy coldness. In this miserable condition he survived desolate and without a ray of hope for several weeks, and finally died lethargic.

Dissection.—Upon removing the top of the cranium the sinuses and the vessels of the membranes were found to be very turgid with blood, particularly those of the right side. The substance of the brain was found to be somewhat softened and the venticles were filled with a bloody serum. The ethmoid bone was very much injured and fast verging towards decay: the right nasal bone was entirely destroyed, while the left one was only partially so, but it was widely removed from its natural situation. The frontal sinuses were filled with a thick matter and the membrane lining them much thickened and inflamed: the bony partition which divides them was completely destroyed.

The upper maxillary bone was very much blackened and reduced in thickness; the walls of each antrum not being more than one third of a line thick. The right antrum was filled with three tumors, each having a distinct pedicle—the membrane covering them being of a shining red color and the tumors uniform in consistence and regular in shape. The left one contained a great number of smaller ones, of every variety in shape, color and consistence. All below the cribriform plate of the ethmoid bone was one mass of the most disgusting character.

One word as to the causes which give rise to the formation of polypus; of these I am inclined to believe, from observation, that *cold* is the most common, if not the sole and universal cause of the disease. The man whose case is related above had been subject to colds for many years previous to the appearance of the disease in his nose, and just before the discovery of it he had taken a violent one from bathing in the river near his residence, which was attended with severe and long continued paroxysms of sneezing. That the disease is scarcely ever the result of local violence is proved by the fact that a single polypus is rarely ever found in the nose, which would often be the case were they so produced: on the contrary, they are always found in clusters, and beyond the reach of the finger or any instrument capable of inflicting injury upon the schniderian membrane in the frontal sinuses and in the autrum of Highmore.

If polypi were always the result of local violence as is contended by some, school-boys who are often in the habit of picking their noses, would be more liable to the disease than adults, which is not the case: they are less often the subjects of it, and this may be accounted for, from the fact of their greater exemption from attacks of cold.

The writer of this is acquainted with four or five individuals who are all subjects of nasal polypi, and in whom there is a great predisposition to take cold: in three of them the tumor made its appearance while they were affected with violent sneezing, increased secretion from the nose, &c. &c.

REVIEWS.

Clinical Lectures, by ROBERT GRAVES, M. D., M. R. I. A., *Professor of the Institutes of Medicine, in the School of Physic, Trinity College, Dublin, etc. etc. Second American Edition with notes, and a series of Lectures. By* W. W. GERHARD, *Lecturer on Clinical Medicine to the University of Pennsylvania, Physician to the Philadelphia Hospital, Brooklyn, etc. etc. etc.*

As we promised, in our last number, we proceed to notice the Lectures with which Dr. GERHARD, has enriched his edition of Prof. GRAVES' Clinical Lectures, and in doing so we shall pursue very much the random course observed, in the remarks made, by us in regard to those of Prof. GRAVES.

In his first lecture Dr. G. has noticed a tendency in opium, which we have more than once observed. In a case of acute disease of the heart, occurring in the course and as a direct consequence of acute articular rheumatism among other peculiarities he remarks:

"The diarrhœa is another feature worth remarking, co-existing, as it did, with the large doses of opium. It was a purely accidental complication, but its occurrence demonstrates that opium, in very large doses, continued for some time, and given much in the same way as the large doses of tartar emetic are by the contra-stimulants, does not produce the same effects as in ordinary doses, thus illnstrating a theraputic law, that remedies, in over doses, do not act upon the system in the same manner as when administered in the usual quantities."

We have, on two different occasions, seen opium purge instead of constipate the bowels. One was in the case of an old and

inveterate drunkard, who had suffered repeatedly from delirium tremens, in the intervals of its attacks he was subject to diarrhœa. For this latter affection he took frequent and large doses of opium. At first it restrained the action of the bowels, but ultimately it had a reverse effect, and he soon perished. The other was in a lady who suffered under chronic diarrhœa, which nothing could prevent from exhausting her rapidly but repeated doses of opium, which were progressively increased in size, by the advice of her physician. In the course of about a year, it not only failed to give her the comfort which it had, but evidently increased the periestaltic action of the bowels. Acetate of lead, strychnia &c. were tried, but they were ineffectual in arresting the fatal tendency of the disease.

We must here present the testimony of Dr. GERHARD, on the subject of diet. The physicians in this country are so hard to persuade that it is possible for a sick man to be starved to death, that we must be excused for pressing this subject on their attention.—Dr. G. says:

"You will find, that in my lectures, gentleman, I am not at all disposed to insist on too rigid a diet. I have seen so much mischief result from the continued enforcement of a rigid diet, in accordance with the mode of practice which was prevalent in France a few years ago, that it is with great caution, and no little reluctance, that I venture upon it, except for a short period. In some of the wards of the Enfans Malades, the practice was to place the children on a rigid diet, and the results were certainly far from favorable."

Towards the close of the fifteenth and last lecture, he tells us that "the lectures of Dr. GRAVES are full of important illustrations" on the subject of supporting the strength of patients in fever.

Had we space we would give the whole of Dr. GERHARD'S fifth lecture which is on *Tubercular Meningetis*, but as it would be doing him injustice to mutilate it by making extracts, we must be content with rocommending it to the attentive study of the reader. *Tubercular Meningetis* is more common in children than is generally supposed, and it is, especially in its first stage, very difficult to diagnosticate and unless its existence be detected early, and the proper treatment be pursued, death will be a too frequent result. On all these points much valuable instruction will be derived from the lecture referred to.

In regard to the diagnosis of secondary inflammation he remarks in reference to sinking with acute pain:

"After the occurrence of the acute pain, the patient sank rapidly, without any other of the usual symptoms of peritonitis, as vomiting, &c., but his prostration was extremely great. Prostration of this character is a striking symptom of the secondary serous inflammation of the peritoneum, and is a most valuable sign in leading us to our diagnosis."

The occurrence of acute pain with prostration, in the course of protracted diseases is an infallible sign of a fatal pathological change. Thus, in cases of phthisis, we occasionally see an intense pleurisy suddenly developed, which progresses rapidly and produces death much sooner than would result from consumption, under ordinary circumstances. Such cases are developed and display great violence in their symptoms, without any indication of their approach having been given. When this happens it is from ulceration having penetrated the pleura, and consequently, the passage of air and pus into the cavity of the chest. This soon gives rise to intense pleuritic inflammation, and serum, as a consequence of this lesion, is poured out. Then we have the physical indications of a liquid and of air in the chest. In such cases, while the pain is very acute there is a decidedly feeble circulation, and they should, occurring in conjunction, under the above circumstances, be considered as very certain indications of perforation of the pleura from the extension of ulceration. In the advanced stages of phthisis there is very generally ulceration of the mucous membrane of the bowels, which gives rise to colliquative diarrhœa. It sometimes happens that violent peritonitis suddenly occurs under such circumstances which is so rapid in its progress as to carry off the patient in a few hours. A case of this kind recently occurred under our observation, and there were those who thought it possible to subdue it. This kind of peritonitis always results from perforation of the bowels by ulceration and the passage of their contents into the cavity of the abdomen, and is, consequently, incurable.

Now what is remarkable in such cases is, that the extent of inflammation is not great—is not near so great as in other cases where death does not take place near so soon. There does not appear to be any fixed proportion between the violence of the symptoms and their rapid tendency to death, and the changes that are produced in the peritoneum. How then are we to account for the rapidity with which cases progress? In no other way, we presume, than by the severity of the sensation which powerfully im-

presses the nervous system. It has been proven by PHILIP, LEGALLOIS, FLEURENS and CHOSSAT, that injuries of the nervous system, when extensive, invariably enfeeble and sometimes destroy the action of the heart. In cases of above kind, there is always great deficiency in the action of the heart very speedily produced, which, doubtless, results from an injurious impression made on the nervous system. This appears to be the most rational way in which the rapid progress of such cases can be explained. It cannot be referred to the extent of the lesion produced, for that, as has been remarked, is always much less than in other cases that advance much more tardily.

There appears to be some other cases of peritonitis which are peculiar and that seem inexplicable upon any other principle. Cutaneous erysipelas is rarely ever attended by a vigorous state of the circulation, & from Dr. ABERCROMBIE's researches it would seem to be a disease that is not confined to that organ, that it attacks the peritoneum, and exhibits peculiarities which distinguish it from common peritonitis. There is no exudation of true lymph and seldom any real pus effused, but it gives rise, either to a bloody serum or a milk white fluid. In this disease there is, very early, great weakness of the circulation, and so rapid is its progress, that the employment of debilitant means is rendered wholly nugatory and ineffectual. In the worst cases of Puerperal Fever it is probable that the inflammation is erysipelatous. There is, at least, much less lymph effused than in ordinary peritonitis—the prostration of the circulation is much greater, and the extent of the lesions is less. It is indeed in the most rapid cases, and those, consequently, the most malignant, that present after death, the least evidence of inflammation. We cannot, therefore, ascribe death in such cases to the extent of the inflammation. There must be some co-existing cause to explain it. This cause is the impression made on the nervous system, which, by reaction, produces defective action of the heart. We find in many forms of inflammation this condition of the circulation, and when it occurs it should always be considered as an unfavorable indication, for however early commenced, blood-letting cannot be carried to the extent necessary to subdue it. Should it be resorted to, as it is in common cases, there will certainly be produced, incurable prostration of the circulation.

On the subject of apoplexy the author attempts to establish a dis-

tinction, which, with due deference to his superior knowledge and sagacity, we must be permitted to say, we do not consider real. He says:

"The term apoplexy is often used very indefinitely. It is applied to four different pathological states: 1st, true apoplexy, or hæmorrhage into the substance of the brain or its membranes; 2d, simple congestion or preternatural fulness of the vessels of the brain; 3d, serous apoplexy in which the brain is oppressed and its functions impeded by a large serous effusion; 4th, nervous apoplexy, in which many of the symptoms, such as loss of consciousness, &c., are developed without any appreciable organic lesion. I shall here employ it to signify an actual hæmorrhage into the substance or beneath the membranes of the brain, excluding mere effusions of serum, all cases where there is no organic lesion of the brain, as well as those in which mere congestion occurs, an affection which is most frequent during the summer season, and at the close of the winter. These cases are all confounded with true apoplexy and indiscriminately classed under the same name; sometimes, indeed, when no one function of the brain is disordered, the term apoplexy is given to sudden deaths. A man will fall down dead, perhaps, with some comatose symptoms from disease of the heart, and his death is at once referred to apoplexy; whereas, genuine apoplexy almost never causes instantaneous death. When the case terminates fatally, it is usually after a lapse of some months, from paralysis. It sometimes proves fatal in the course of a few minutes, or half an hour; but in these cases there is usually blood effused into the ventricles, and it is not common for it to terminate before the end of several hours, even when most severe. The exceptions to the rule, that sudden death does not follow apoplexy, are indeed so rare, that you may pretty safely pronounce an instantaneous death to be independent of this cause. These very sudden deaths are usually owing to diseases of the heart, although in some of them no organic lesion whatever can be found of any organ."

Again he says:

"Another point of some importance, in making a diagnosis of apoplexy, is to distinguish it, during the first few hours of the affection, from mere congestion of the brain. This is not so easy first, as after the lapse of a few hours; but there are some peculiarities about these affections, which, if closely attended to, will serve to draw the line of distinction. In the first place, after the first few minutes of the loss of consciousness, which usually occurs at the beginning of both, there is paralysis of one side alone, in apoplexy. In congestion, on the other hand, there is scarcely ever complete paralysis of either, but there is generally some difficulty of motion in both."

Thus it would appear that to constitute apoplexy Dr. GERHARD, supposes there must be "an actual hæmorrhage into the substance or beneath the membranes of the brain." Now, we confess our inability to perceive any essential difference between apoplexy, the result of mere congestion, from apoplexy, in which there is hæmorrhage, into the substance of the brain. Congestion of the brain

terminates fatally, in some cases without effusion of blood, and in some instances there is hæmorrhage. The only difference between the two classes of cases is, a rupture of blood vessels in the one and not in the other. When there is hæmorrhage there is necessarily a determination of blood to, and congestion of the vessels from which the blood escapes. In the one, death takes with, and in the other, without a rupture; the former lesion is not necessary to the fatal result, while the latter is. Therefore, congestion is the essential pathological condition in apoplexy while the hæmorrhage is merely accidental.

The author remarks that in apoplexy there is "paralysis of one side alone," while in congestion "there is scarcely ever complete paralysis of either." This is true, and it can be easily explained, without supposing an essential difference between apoplexy and congestion. When there is hæmorrhage, the whole brain is in as complete a state of congestion, as when there is not. The brain in both cases is in precisely the same state until that lesion takes place, and when, in the one, the vessels, from disease, give way, there is effusion of blood, and paralysis results. But this is not essential–paralysis is not pathognomonic of apoplexy–it is an event that may or may not happen and yet that pathological condition exist, which constitutes apoplexy. That hæmorrhage into the substance of the brain is an accidental consequence of congestion of that organ, and not the essential pathological state in apoplexy is proved by the fact that it depends, in most cases, upon a previous diseased condition of the blood-vessels which facilitates their rupture. When this exists there is effusion, and when it does not, there is seldom any; so that if hæmorrhage is necessary to constitute apoplexy, it is an affection that depends more upon the state of the blood-vessels than upon any other circumstance.

That death does not occur from hæmorrhage as speedily as from violent congestion is not surprising: nor does this prove that apoplexy is not congestion. From determination of blood to the brain an individual becomes insensible, and if this continues death cannot be a remote event, but if by depletion or any other means, this condition of the vessels is removed, consciousness is restored. Sometimes this is accomplished by the rupture of some of the congested vessels and effusion of blood into the brain ensues. This

takes off the undue pressure from the brain, and the insensibility is removed, and if the effusion of blood should not be great, it will be gradually absorbed, and the individual may live weeks and months. No such thing as this can happen in congestion without rupture—the cause which produced the insensibility continuing, death must be a much more speedy result. There is apoplexy then without, and with rupture of blood-vessels—this latter lesion being accidental and generally dependant on a diseased condition of the blood-vessels adjacent to, or at least on a level with the ventricles, the corpora striata, thalami, or adjoining parts, which has rendered them rigid, inelastic and brittle.

That congestion is the fundamental condition in apoplexy when there is hæmorrhage, as well as when there is not, is proved by what is seen in other parts of the system. It sometimes happens that violent dyspeptic symptoms result from the suppression of the menses, which are relieved by a vomiting of blood. We have the same symptoms precisely, under the same circumstances, without such vomiting, and without, consequently, the same instantaneous relief. Both cases evidently depend upon congestion of the stomach, that lesion being clearly announced in the one by hæmorrhage bnt not in the other. This is their only point of dissimilitude, and it is accidental.

Diarrhœa very generally depends on congestion of the mucus membrane of the bowels, as is proved by the great increase of the natural secretions of that membrane. In some instances we have a copious discharge of blood from the bowels and the diarrhœa ceases. Now, is the occurrence of hæmorrhage in one case and not in the other, a ground of fundamental difference between them? We would suppose not. The hæmorrhagic phenomenon only illustrates and explains the essential pathological state in those cases in which it does not occur. When it is manifested, it is conclusive proof of congestion of the mucus membrane, and when it is not, but all the other indications of congestion are present, we should conclude that the same pathological state of the membrane exists.

Congestion is a separate and distinct pathological state, but which often, and that very soon, if not speedily remedied, leads to other lesions. Thus, hæmorrhage is a common consequence of congestion, and it frequently also passes into actual inflammation. But neith-

er of these results uniformly follows—hæmorrhage occurs particularly in the brain when there happens to be such disease of the blood-vessels as facilitates their rupture, and inflammation is set up, whenever congestion of that organ, is suffered to continue for too great a length of time.

Amongst the *secondary symptoms* of phthisis Dr. GERHARD ranks hæmorrhage, and says:

"If the hæmorrhage be profuse, that is, not less than two or three ounces in a day, it is considered almost pathognomonic of phthisis, especially in males; in females, it is not so certain as a diagnostic sign, for hæmorrhages from different parts of the body often arise from suppression of the menses, &c., and are, in fact, *vicarious discharges.*"

We have no fault to find with the pathology of the above remarks, but we must object, in decided terms, to their physiology. By 'vicarious discharges,' I presume, we are to understand *vicarious* secretion, for the menstrual flux is a secretion, which is saying that one organ performs the function of another. This is a popular opinion, and we, therefore, do not hold Dr. G. at all responsible for it. Considering, however, his great professional claims to public confidence we are surprised that he should, even by indirection, encourage an opinion which a little reflection would have convinced him, is erroneous. Difference of organization gives rise to difference of function and we, therefore, conclude that every organ that elaborates a specia secretion does it in virtue of an organization which specially adapts it to that purpose. The fact, therefore, that peculiarity of structure imparts character to the products secreted from the blood, is positive proof that those products cannot be made to appear where the proper structure is wanting, and that the proper structure is wanting in those parts in which it is supposed vicarious secretion is performed, as in the lungs, for example, when it is alledged that they perform the office of the uterus, no one will deny.

When the secretions of certain organs are retained, we see phenomena developed that, upon a careless examination, might be taken for vicarious secretion. This happens in relation to bile, for when the ductus choledocus is obstructed, we see that the skin, nails and eyes become yellow, and when there is a suppression of urine, it has been said, that the axilla, umbilicus and other parts have poured it out. The fluids thus discharged, doubtless contain, as has been shown

by chemical reagents, some of the proximate elements of those secretions, but that any other organs than the liver and kidneys can secrete real bile and urine is, not only improbable, but ridiculous and absurd. One organ cannot perform the office of another.

It is said that, in some cases, particular organs perform the office of the mamma. This is untrue. A true vicarious secretion of milk never took place. Fluids have unquestsonably been discharged from various parts of the system that, in some respects, resembled milk, but they were not milk. It has been ascertained that such fluids, when analyzed, do not yield the essential components of milk. They are destitute of the sugar of milk and butter. Nor is it more true, that the menstrual flnx, when its formation in the proper organ is prevented, is discharged by the stomach, lungs, &c. A colored fluid resembling the catamenia is vomited and expectorated, but it is not a secretion. It according to Lavagna, Toulmuche, Brande and Muller, contains no fibrin, while that organic element exists in the fluid, that is thrown out in vomiting and expectoration. In cases of suspended secretion of bile, urine, milk and the catamenia some of the proximate components of those secretions respectively may be found in the blood, or be discharged from the system through other than the usual channels, which would have been, in a state of integrity of the secretory organs, elaborated by them into their proper secretion. But this, on account of disease, not being able to do themselves, it is very certain that no other organs can do it for them. Were such a thing possible we should be at a loss to discover any purpose to be answered by such a variety of structures as are observed in animal bodies.

But we must now part with Dr. GERHARD, and we do it with regret. We hope, however, that the extracts we have made, and the opinions we have examined, are sufficient to enable our readers to form some estimate of the merits of his Clinical Lectures, and they will, we are persuaded, join us in the belief that they constitute a valuable addition to those of Professor GRAVES.

Insanity and Insane Asylums. *By* EDWARD JARVIS, M. D., *Louisville, Ky., pages* 40, *oct.*

Such is the title of a pamphlet on our table. We have perused it with some care, and find it to be a good summary of all that is valuable, in reference to asylums for the insane. It brings to view the practical operation of the system of moral appliances, that is now so popular, all the world over. Specially called, as we were some years ago, to examine into the management of the best institutions in Europe, as well as our own country, and having ever since taken a deep interest in these matters, we can testify to the fidelity of Dr. JARVIS in the effort before us. He is entitled to the thanks of all true philanthropists.

Nor do we intend to abate from this meed of praise, by fault-finding in reference to the remarks on the Kentucky Lunatic Asylum. It has been our lot, to be somewhat in Dr. J's. situation. Residing at one time in the State of Ohio, we were called upon, in self defence, to expose the wretched management of the insane in that State. We were, in part, officially charged with the treatment of the inmates of what was called, the *Ohio Asylum;* and not a little odium was attempted to be heaped upon the medical attendants, by the baser sort, who claimed for themselves, all the intelligence, as well as all the honesty, of the medical profession. But we happened to have seen and reflected on this subject, quite as much at least, as the demagogues who slandered us; and to the sore mortification of some of them, we were publicly invited to address the Ohio Medical Convention, the State Legislature, and other citizens, in the Presbyterian meeting house of Columbus, on the special matter now before us. The assembly was very large and highly intelligent. In the effort made on that occasion, we exposed, from personal knowledge, the defects of the existing asylum; declared it to be unfit even for a common jail, and by contrast with the best institutions in our country, pointed out, the actual wants of Ohio, in the premises. By this, and collateral efforts, made almost exclusively by our own friends, a noble project was drawn out in detail, and actually carried by the Legislature of the State; and now they have an asylum, that is worthy of a generous people.

We know full well, that no asylum can have that success which is attainable, unless a medical man, with liberal salary, devote his whole time, to its careful supervision, aided by all the assistants of

both sexes that may be needful, as well as by all the various means of exciting interest, and of increasing personal comfort, that can be secured by money. We go for the whole. Not a suggestion should be overlooked, not a hint forgotten, if it may be made available to relieve or cure the unfortunate inmates. The cost is the *last* consideration, and the *least.*

It is possible, however, for some who may read the pamphlet of Dr. Jarvis, to form the opinion, that the defects of the Kentucky Asylum, are chargeable to the medical faculty of Transylvania University. That gentleman has not made the allegation, nor did he so wish to be understood. But it takes all sorts of things to make a world; and hence, there are those, and they arrogate all wisdom to themselves, who may try to make capital of this matter and attempt to bring odium on a Faculty, that is no more accountable in the premises, than is the Emperor of Russia. Because, forsooth, some half a dozen medical professors gratuitously serve an institution, as consulting physicians, for years, they are to be censured for its defective plans and lack of success!! Now, be it known unto all men, that the faculty of Transylvania have not now and never have had, a whit more to do in the government of the Kentucky Asylum, than has the author of the pamphlet. If there be blame any where, the faculty will not bear a particle of it.—That there has been, and is yet cause for complaint, we concede, we lament, but we wash our hands clean and white as the driven snow, in all that appertains to this affair. Hence we say, with all our heart, let the Legislature appoint a *working* committee, to look into the subject, and let that committee fearlessly expose every weak point, bring darkness to light, and order out of confusion, and our Asylum will yet stand out, a proud monument of philanthropy, a glory and an honor to the West. M.

An Introductory Lecture to the Course of Institutes of Medicine, &c. delivered in Jefferson Medical College, November 1, 1841. *By Professor* Dunglison. *Published by the class.*

This is an excellent lecture and merits the attentive consideration of the profession, amongst other good things on account of the amiable

and gentlemanly spirit which pervades it. Often have medical practitioners been exhorted to pursue a high-minded and honorable course of conduct in order to obtain practice. This is necessary, not only to harmony and good-feeling amongst physicians, but also to the commanding of that respect from the world, to which men cultivating a liberal profession, in a liberal manner, are entitled. It has not been thought necessary, heretofore, to appeal to Professors on the subject of acting in a gentlemanly and dignified manner: it has been supposed that the stations which they occupied constituted a sufficiently certain guarantee of unexceptionable deportment.—Experience has not enabled us to realize the truth of this supposition. Professors, to procure pupils, have condescended to resort to expedients as low and mean as were ever adopted by the most contemptible quack to procure patients. It is an idle mockery for professors to plead with practitioners to act as gentlemen, when they laugh at the idea as a stale notion unworthy the thoughts of all but those who consider "*honesty the best policy.*" Without the hope of effecting a reformation in any quarter, but with the desire of placing our seal of condemnation upon vices which should excite disgust instead of respect and alienate instead of procuring patronage, we place before our readers the following pointed and strictly true remarks of Prof. DUNGLISON, who is entitled to the gratitude of the respectable portion of the profession, for drawing attention to an important subject. He says:,

"It has ever been a part, I will not say of my policy, but of propriety, to entertain the kindliest sentiments towards every respectable institution that is engaged in the great object of medical instruction. It becomes us not to harbour an ungenerous thought towards any honorable member or association of members of our profession. It is easy for two or more institutions to move on harmoniously to one great goal; and to mutually feel and act—not as bitter rivals endeavoring to injure or destroy each other, but as energetic and devoted members of a profession, which one of the first of the Romans conceived to elevate man nearer the gods than any other avocation—competing with each other as to which can render the greatest amount of benefit to mankind. It never can be godlike, or proper, or even politic, to disparage the useful efforts of others. All experience, indeed, proves the impolicy of such a course; and were it even shown, that the number of students in any institution could be augmented by it, success would not be desirable, because it would not be honorable.

"With these feellngs on the part of myself, and, I am sure I may add of my colleagues, it wiil be an object of anxiety with us to have such an orgauization of the school, as will enable us to persist in our career

of usefulness, indulging the best feelings towards our honorable competitors."

"To the Board of Trustees of this institution belongs the responsible office of effecting this desirable consummation. My estimable colleagues and myself are desirous of seeing established a strong and efficient corps, composed of individuals whose very names will be a presage of success. To aid in this great object, I may add, that no unworthy considerations of self-comfort will be indulged on our parts; and that so far as I am concerned, I am willing to accept the most humble position—if there be any one in the school which is more humble than another. With this spirit of self-sacrifice for the good of the whole, success, it appears to me, is inevitable under the judicious determination of our Board of Trustees; and I feel justified in assuming, from what I know of the sentiments of several of its members, that their desire, in making the new appointments and arrangements, will be to ensure, as far as may be in their power, the harmony, stability and reputation of the institution; so that hereafter, and in the lapse of years, her numerous alumni may be enabled to exclaim with pride and exultation: 'It was from this flourishing and distinguished school that we received the highest honors of our profession.'"

Would that the alumni of all schools of medicine, could thus exclaim!

On another subject that has inspired more interest and commanded more attention than we believe it is entitled to, the Professor thus discourses:—

"Of comparatively recent origin, too, is *Pathological Anatomy*, one of the greatest aids to diagnosis or to the knowledge of disease, but still an aid only; forming, indeed, but a link in the chain of evidence, and very often exhibiting to us the result, rather than the nature, of the diseased action; yet worthy of all attention from him who would desire to know his profession in the manner in which it ought to be known."

This extract is made merely to say that ere long we design to expose the fictitious claims of Pathological Anatomy. The only end of the healing art, the cure of diseases, it has not and will not soon advance.

"*Important Era in the history of Science in this country. The Inauguration of the Medical Faculty of the New York University.*" PROFESSOR PATTISON'S *Address. New York Herald of June* 10*th*, 1841.

Such is the swelling flourish of trumpets, with which the organ

ization of a new medical school, in the city of New York, is proclaimed to the world. Listen, ye nations, and be silent! Close up the antique doors of your venerable temples, ye Genii who have so long watched the shrines of Esculapius, at Leyden, at Montpellier, at Paris, at London, at Edinburgh; and you of Philadelphia, of Boston, of Hanover, of Transylvania, hang your diminished heads, and bow yourselves down before this august and resplendent Sun of the Medical world! What a blessed lot has fallen to us, to live in the midst of such a transcendant and illuminated epoch as that of this "*New Era in the history of Medical Science.*"! Let us endeavor to be grateful for such extraordinary and unmerited favors!

That great event, the history of which is lying before us, took place, it seems, in the Chapel of the New York University, on the evening of the ninth of June, in the year of grace, one thousand eight hundred and forty-one. It is pronounced by the Herald to have been "a very brilliant and interesting scene."—"There was a very large number of very lovely ladies present, particularly one party of very young females, on the right of the Speakers."

The exercises commencd with a piece of music from "Moses in Egypt," apparently by four or five horns. The horns, we take it, were *of brass;* and the piece of music contained, we have a right to presume, some recondite and profound allusion either to Egypt as the cradle of medical science, or to the old, or Mosaic dispensation in Medicine, just now to be swallowed up in the new light of the New York University. After this a piece was played from "Tancredi." It is many a day since we read *La Gerusalemme Liberata;* we are not familiar with the opera, and as we are not told what the particular piece of music was, we are unable to inform our readers of the appositeness of this selection. Immediately after it was played, General Tallmadge, with sundry other gentlemen, accompanied by the members of the New Faculty, *in embryo*, entered the chapel. "The six eminent medical gentlemen," who were about to be inducted into office, sat together in a pew immediately in front of the pulpit." "Dr. Mason then made a most beautiful and affecting prayer," at the close of which the music played "Oft in the stilly night." The propriety of this last piece is not quite clear to us. There is but one inter-

pretation that occurs to us, at all plausible, and that is surrounded with many difficulties. We thought, however, that a distinguished gentleman, then present, as he run his eye back to the palmy days of his prosperity, must have felt, at any rate, the sad but truthful significance of the closing stanza, which has been married to the immortal music:—

When I remember all
Those friends, so linked together,
I've seen around me fall,
Like leaves in wintry weather;
I feel like one who treads alone
Some banquet hall deserted:
Whose lights are fled, whose garlands dead,
And all but him departed.

After this, General Tallmadge made a short speech, at the close of which there was great applause, and another piece of music. The General then called over the names of the Faculty elect; whereupon, in the elegant and classical phraseology of the organ of the new School, "*they all rose up and stood in a row.*" They were now formally inducted into their respective offices, and thus ended the first scene of this august and eventful drama! of which, as public journalists, we thus have "a round, unvarnished tale delivered," and of which also we have "nothing extenuated, nor set down aught in malice."

At the close of the installation, Professor Pattison was introduced to the meeting and *delivered* his Inaugural Address. We have neither room nor leisure, to give any detailed or elaborate notice of this document, but we were grieved to see the flagrant departure from professional usage and courtesy exhibited in the first sentence of this salutatory. It is a universal axiom in medical etiquette that no member of a medical Faculty has a right to travel out of his own special province into that of his colleagues. Professor Pattison has charge of the anatomcal department, but the very first words of his address were the following:—"*In the birth of an infant there is a deep and absorbing interest.*" Now we have no wish to impugn either the truth or the novelty of the fact thus broadly and unequivocally laid down; but we do think that the Professor had no right, at the very outset of his career, and in this bold manner, without preface or apology, to touch upon the ground of his colleague, the Professor of obstetrics.

But let us quit this view and be serious, if seriousnes is in any way attainable upon such a subject as this. We wish to say, which in all soberness we do say, that the whole account of this transaction, as contained in the Herald, together with the address of Professor Pattison, is offensive, in bad taste, and everyway unworthy a high-minded and gentlemanly profession. The address is inflated and bombastic in its style, and to an unpardonable and disgusting extent, arrogant in its pretentions, both open and implied. It is high time that this offensive exaltation of SELF, and uncourteous and malignant depreciation of others,—in connexion, especially, with medical schools,—was rebuked, and our only regret, in this relation, is that we have not a lash of scorpions with which to whip these offenders as they deserve. One would think, from this address, that up to the present time, there had been no efficient medical School in the United States; and that, henceforth, and forever more, there was to be, and could be none, saving and excepting that of the University of the City of New York. There is one point, in this matter, which deserves especial notice, and especial reprobation. There is no allusion, not the remotest, to the old Medical college of the city. No one would suppose from the perusal of Professor Pattison's address, that there was, or that there ever had been, a Medical Institution in the city of New York. Where were the shades of Mitchell, and Macnevin, and Hosack, and Post, that they did not paralyze the tongue of the defamer? We are not in the habit of making invidious comparisons, and we do it here only in the cause of outraged justice and as we are provoked to it, but we can tell the gentlemen in whose behalf, as well as for himself, Professor Pattison speaks that both he and they will have to do their best,—they will have to buckle on their armor and to gird up their loins, as they have never yet done, in order to give,—not a better,—but as good a course of medical instruction, as is given in the old School. There are strong and accomplished men in that School,—pillars and ornaments of the profession to which they belong,—and they should have received other treatment than this studied and contemptuous silence from the hands of Professor Pattison. We cannot but notice the wide difference, in this respect, between the address of Professor P., and the magnanimous and courteous spirit of the introdnctory of Professor Dunglison.

We have now done our duty to this subject. We have spoken as we have spoken, from the sincere and honest indignation of our heart, and we are well assured, that thehonorable and high-minded members of the profession, at the East, as well at the West, in the city of New York itself, as elsewhere, will give to our words a glad and hearty response.

An Introductory before the students of the Medical College of Ohio, Nov. 2, 1841. By JOHN P. HARRISON, M. D., *Professor of Materia Medica and Therapeutics.*

The following sentiments of the Professor we approve, and moreover, we are glad to see them come, as they do, from a city that has suffered more than any other, within our knowledge, from dismembering factions.

"Far be it from me to lend any encouragement to a spirit of jealous strife among physicians. Unhappily our profession is too notorious for degrading exhibitions of rivalry, and envious detraction. We hope a better feeling is spreading through its ranks—we trust that ere long a noble, honorable emulation will root out, and forever destroy this heretofore too common feeling of detracting jealousy, which has done so much to degrade us in the eyes of the public. Let us, one and all, endeavor to provoke each other to high and good deeds; to an ardent devotion to science; to a generous competition of usefulness; then shall the profession of medicine be vindicated by the illustration of its beneficent tendencies, and by the glory of its scientific renown, from the sneers of ignorance, and the frowns of malice."

The following description of the conduct of the "ignorant physician," in cases of difficulty, we give as a specimen of *fine writing*, with which, *in truth*, the address abounds.

"But let the storm arise, and the sweeping billows swell into wild surges, and the face of day be curtained over with wrathful vapours, and cast loose from the shore, the vessel be driven far on the tempestuous tide. Now all hands aboard in consternation, watch the conduct of the ship, in which their all is embarked, and if sea worthy, in pride of place, she rides the booming waters, and triumphantly caries her freight to port. But if ill built and badly rigged and ballasted, the unhappy crew must partake of the fate which awaits the ship. She reels on the angry billows—alarm seizes every soul—now she springs aleak—the gush of waters is heard below—the shriek of despair rises—the pumps are plied—the freight is thrown overboard—all in vain. She pauses—settles—to the silent depths—vessel and cargo—and passengers sink."

MONTHLY PERISCOPE.

Animal Magnetism as a remedy for the cure of the Deaf & Dumb.—A Mr. Dupotel, one of the modern miracle-workers, professed ability to confer, by Animal magnetism, on the deaf and dumb the faculties of hearing and speaking. Cases were given him by the Academy of Science and were subjected to his treatment, and although they were reported cured at the end of eight days, they were found, on examination, not to have been benefited in any respect. As it may be instructive, if not amusing, to the *philosophical visionaries*, in this neighborhood, who are always soaring on the wings of conjecture and uncertainty, we will gratuitously inform them that it appears "from the report of a subsequent meeting of the Academicians, that it was resolved by a large majority, that they will not hear anything more on the subject of this mysterious science! Several of the members indeed objected to this peremptory decision, asserting that, although there is much quackery in many of the statements of its admirers, there seems to be some observations and phenomena, which deserve to be more attentively examined. MM. Cloquet and Bouillaud expressed themselves to this effect; and on the other hand M. Breschet said that, as the Academy of Science had come to the resolution to proceed at once to the order of the day, whenever the question respecting the quadrature of the circle or perpetual motion was brought forward, the subject of animal magnetism should be dealt with by them in the same way."

Sulphuretted Hydrogen, the cause of Fever.—Professor Daniell, Foreign Secretary of the Royal Society, &c., has found in the waters of the African Rivers, a large quantity of suphuretted hydro-

gen gas, and in sufficient quantity, he believes, to account for the great destruction of copper sheeting upon vessels in these waters; and also, to account for the deadly sickness which prevails on those shores. As his remarks on the destruction of copper may not be particularly interesting to our readers, we will omit them altogether, and direct their attention to what he has said, as to the cause of fever. He observes:

"When this matter was first brought under my consideration, I was surprised that the nauseous smell which must necessarily be evolved from water impregnated with this gas at so high a temperature as that of the equinoctial regions, had not been noticed. I have in consequence turned to some of the accounts of the late travels in Africa to seek for evidence upon the subject; and in a narrative of the expedition into the interior of Africa, by the river Niger, by Magregor Laird and R. A. B. Oldfield, I found the following important observations:"—

"'The principal predisposing causes of the awful mortality, were in my opinion the sudden change from the open sea to a narrow winding river, the want of the sea-breeze, and the prevalence of the deadly miasma, to which we were nightly exposed from the surrounding swamps. The *horrid sikening stench* of this miasma must be experienced to be conceived; no description of it can convey to the mind the wretched sensation that is felt from some time before and after day-break. In those accursed swamps, one is oppressed not only bodily, but mentally, with an indescribable feeling of heaviness, laguor, nausea, and disgust, which requires a considerable effort to shake off.' Now these observations were made in the very locality from which the first waters I examined were taken, and nothing more is wanting to identify the cause of the rapid decay of the ships' copper with that of the mortality of the climate. It has been experimentally found that so small a mixture as a fifteen-hundredth part of sulphuretted hydrogen in the atmosphere acts as a direct poison upon small animals, and the sensations of languor and nausea, described by Mr. Laird, are exactly those which have been experienced by persons who have been exposed to the deleterious mixture in small quantities. The symptoms occasioned by breathing the gas in high concentration are well known to medical men. Now, can it be deemed at all improbable, that an agent which is capable of acting with this severity as a direct poison, when mixed in no very high proportion with the atmosphere, should in still less quantities greatly aggravate the symptoms of morbific action, which may possibly have their origin in other causes. The close investigation which I have given to the subject more and more convinces me that the worst cases of *malaria* are generally connected with sulphuretted hydrogen."

Hear what he suggests on this subject in relation to New York, Charleston, &c. "Is it not worthy of the most exact inquiry whether the fevers which periodically afflict the cities of New York and Charleston, in America, may not be connected with the mixture of animal and vegetable substances with the sea-water in their lower districts, where they usually originate; and whether an attentive examination will not

prove that the same impregnation of sulphurretted hydrogen, which we have established upon the African coast, exists at the mouths of the vast rivers of the American continent. Indeed I have been informed by an officer, high in the naval service, that during the war instances of the rapid decay of ships' copper, similar to that upon the African, were noticed upon the West-Indian station. And here again it may be asked, as in the case of the copper upon ships, can science indicate a remedy, as well as point to the disease? And again I would reply that by furnishing an easy method of detecting the evil, she furnishes you with timely warning to fly from the infected region. No vessel should be allowed to cast anchor or linger in sulphuretted waters. But if paramount duty should oppose itself to such a course, we have a certain remedy to propose. Plentiful fumigations of chlorine would infallibly prevent the deleterious effects; and the antidote is at once cheap, and incapable, under proper management, of producing any injurious effects to counterbalance its advantages. The Lords of the Admiralty have received these suggestions with indulgence, and have given instructions to their cruisers upon the African coast to test the waters at regular intervals. They have abundantly supplied the African expedition with the means of chlorine fumigation; and I have the gratification of knowing that the views I have now had the honor of submitting to you have tended to give confidence not only to the gallant band who have devoted themselves to one of the most disinterested enterprises which ever emanated from pure Christian charity, but to the numerous friends who wait the result with anxiety."—*Bost. Med. & Surg. Jour.*

Memoranda—Dr. Martin, of Ala., has been convicted of the murder of his brother.——Dr. Chauncey, convicted of producing abortion, has been pardoned by the Governor of Pa., before completing his term of service; this is all wrong, for however loose the morals of legislators may be, as to the crime of producing abortion, the medical profession should look upon it as murder, at any period when not imperatively required in the judicious and conscientious discharge of obstetrical duty; in no case would we testify so cheerfully and positively against one of the brethern.——William P. Russell, M. D., of Middleburry, Vermont, has been appointed Professor of Medical Jurisprudence in Castleton Medical College. Dr. R. formerly held the same chair in the Vermont Medical College.—*New York Medical Gazette.*——Dr. Rainy has been appointed Professor of Medical Jurisprudence in the University of Glasgow.—*Boston Med. & Surg. Jour.*

"Electro-Magnetism bas been successfully resorted to in one case in England, to set the respiratory muscles in action, after the in-

dividual had been poisened by opium. Although the stomach had been carefully cleansed by the pump, the patient could not have been re-animated, had it not been for the happy application of this new agent, administered by a very small machine." Pitch has been used by Dr. Wardsworth, with advantage in many cases, both of external and internal piles. His usual formula consists in ordering 3½ grains of Pitch to be made into pills, two of which are to be taken every evening. The well known efficacy of balsamic remedies in piles may perhaps serve to recommend these pitch pills.——In a case of Hæmorrhage after the extraction of a tooth and other remedies had failed, Mr. Ray firmly forced a stick of nitrate of silver, rounded at the extremity, into the socket, allowed it to remain there a few seconds, and upon its withdrawal, he found there was a complete cessation of the Hæmorrhage.——The forcible injection of cold water from a two ounce syringe has been perfectly successful in several cases in the hands of Mr. Carpenter, of Castle Corner, Ireland, in removing foreign bodies from the ear. In some instances after the injection of the cold water, they have been found laying at the orifice from whence they can be easily extracted, and in others they are forced out completely.——In Silliman's Journal, two cases of poisoning by arsenic are recorded. They were saved by a strong infusion of tobacco juice, given internally. None of the dangerous effects which usually result from tobacco, were produced.

Necrology.—We note with regret, the death of Dr. Samuel G. Baker, of Baltimore, late Professor of Materia Medica and Therapeutics in the University of Maryland, and one of the Editors of the Maryland Medical and Surgical Journal. Though quite a young man, only 27 years old, Dr. Baker had acquired considerable reputation as a Lecturer—he was brother to Dr. W. N. Baker, Professor of Anatomy in the University of Maryland, who died in February last, and son of Dr. Samuel Baker, who for years occupied the chair from which his young son has been so prematurely removed.—*N. Y. Medical Gazette.*

Dr. Robert Cowan, Professor of Medical Jurisprupence in the University of Edinburg, is dead.

To Correspondents.—The editor wold be pleased to receive for publication, short practical articles, from physicians of observation, and reflection. Favors are on hand from Drs. Blue, McNelly and John M. Duke. The communication of Dr. Duke, is in relation to a trial which took place in Maysville, the object of which was to determine if a certain female, who sued for her freedom, was of the Caucasian or African stock. She was brought to Maysville as a slave, but the traces of African origin were nearly, if not entirely inappreciable, and consequently, measures were taken to free her. There was no other evidence of pure Caucasian origin, than her physical characteristics, and these, it appears, were sufficient to satisfy the court. Is it possible for the African, by repeated crossings with the Caucasian, through many successive generations, to have all trace of African taint obliterated?—Can African blood, though ever so much diluted by admixture with the Caucasian, be detected by any certain signs? This is to become an interesting and important subject, and it would be well for Medico-legal enquirers to turn their attention to it.

To the Medical Public.—The third No. of the Western and Southern Medical Recorder is sent to a number of individuals who have not, as yet, subscribed for it, in the hope that after giving it a candid examination they may be induced to do so. If this expectation should be realized, they will please inform the editor of it immediately, and he will have the previous numbers sent to them. As payment is required in advance, we direct attention to the terms of publication, which may be seen by reference to the inside of the cover, and to the subjoined facilities for the transmission of money to the editor.

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THE

WESTERN AND SOUTHERN MEDICAL RECORDER.

EDITED BY JAMES CONQUEST CROSS, M. D.

Professor of the Institutes of Medicine and Medical Jurisprudence in Transylvania University, and late Professor of Materia Medica and Therapeutics in the Medical College of Ohio.

No. 4. LEXINGTON, KY. FEBRUARY, 1842. Vol. 1.

PRACTICAL NOTES ON LEAD POISONING.

BY THOS. D. MITCHELL, M. D.,
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Many of the more important toxicological facts in relation to lead, are too little known to the profession; and there are many physicians who do not appear to be aware, that much of the dyspepsia and bowel disease, prevalent in our country, is fairly attributable to the agency of this metal, as connected with various processes of cookery. The poison may be very largely diluted, and its operation may be slow, yet the final certainty of the pernicious result, is no less real. Impressed by these considerations, I have ventured to submit the following desultory hints. Let them go for what they are worth.

So many and so various are the applications of lead in domestic economy, that it is wonderful that so few accidents have followed its use. Even in the metallic form, it may do mischief, and the oxydes as well as the salts of lead, both by accident and design, have been the means of destroying many lives.

Among the simplest forms of lead poison, we notice those seen in plumbers, printers and others, who work in the metal, either in its pure state, or blended with other metals. In large cities where plumbers are numerous, lead colic is very common, although these persons handle lead pipe and other forms of the simple

metallic matter. Now and then, however, they are exposed to the vapors of the metal, in a state of oxyde, formed by heat. To guard against the pernicious effects, master workmen give sweet oil to their apprentices, and feed them a good deal on fat broths, to sheathe the stomach and bowels.

Almost from time immemorial, the formation of a crust on lead, over which water has passed, has been frequently noticed, and its deleterious tendency guarded against, by statutes prohibiting the use of leaden pipes of conduit. Yet it is equally notorious, that leaden pipes have been employed, without imparting to water, any sort of pernicious quality. This has been known for many years in the city of Philadelphia, where repeated examinations have failed to detect lead in solution.

These diverse facts led to many experiments, from which it is inferred, that water, free of the salts usually found in spring water, is soon contaminated; while the presence of such salts, destroys the capacity of the water to corode the lead. Distilled water was charged, by Guyton de Morveau, with sulphate of lime, and it failed entirely to display any action on the pipes.

It is matter of history, however, that *lead colic* was not known in Amsterdam, until after the introduction of lead-roofing for the houses; then it raged with violence. In 1814, many thousand feet of lead pipes were laid to conduct the waters of Tunbridge wells to the different houses. In the next year, the lead colic was very prevalent, and on examination being made, the water was found to hold lead in solution. On the same principle, it is supposed, and correctly we think, that the *dry belly-ache* of the West Indies is caused. The roofs in that region are frequently painted, and the water falling on the surface charged with lead, and thence collected in tanks, constitutes the common drink, and is employed in domestic economy.

In the 19th vol. of *Medical Commentaries*, we are informed of the production of a violent lead colic, on board a packet bound to the East Indies, from the use of water kept in a leaden cistern, and furnished with a stop cock. On arriving at St. Helena, and obtaining wholesome water, the hands gradually recovered.

In the cases cited, there was doubtless a lack of the saline matters, commonly found in spring water, and hence, the lead was acted

upon. The investigations of Christison and others make it pretty certain, that in proportion to the purity of water and the presence of carbonic acid gas in it, will be the corrosion of the metal. In all cases of the contamination of water by means of leaden vessels, we may show the presence of the metal in solution, by the sulphuretted hydrogen gas. It strikes a brownish color, and a precipitate finally settles at the bottom.

To show, most conclusively, the effect of leaden pipes under some circumstances, and those not unusual, by any means, the following account, given in *Lambe's Essay on Spring Water*, will be found very important. "Lord Ashburnham's family, in Sussex, was supplied with spring water from a considerable distance, by means of leaden pipes. Every year, the servants were tormented with colic, and some of them died. The water, at length, was examined by Dr. Higgins, who reported that it contained an unusual amount of carbonic acid, which acted on the lead and formed a carbonate. In consequence of this discovery, the leaden pipes were taken up, and wooden ones put down, after which the family had no particular complaint in the bowels."

From what has been said, we conclude, that although water in some regions may be carried in leaden pipes without injury, yet on the whole, seeing that this metal frequently exerts a deleterious agency, it would be well, if it were excluded entirely from this use, and either iron or wood, employed, as substitutes. Could an accurate chemist be always found, to determine the presence of saline matters in spring water, the lead pipes might be safely resorted to. Dr. Christison tells us, that rods of lead kept in the waters of *Air threy*, for thirty-five days, were unchanged, and of course the water as pure as ever. These waters contained a 77th part of their weights of sulphates and muriates. But, as it is not practicable at all times, to procure the services of an able analyst, the safer course is to avoid the hazard, by making use of agents that are not capable of doing harm.

If water, tolerably pure may be acted on by lead, so as to be deleterious, we need be at no loss to conceive how various kinds of food and drink may be contaminated by the same means. Thus, cider, (which of course, contains malic and acetous acids,) may be converted into a source of mischief, apart from its intoxicating power. A gentleman had a quantity of cider on hand, rather too

sour for his use, and he supposed it might be remedied, by boiling it with a little honey, in a brewing vessel, the rim of which was capped with lead. All who drank of the liquor, thus rectified, were seized with colic of greater or less violence. A servant, who perhaps drank most freely of it, died very soon, in convulsions, and several others of the family were greatly distressed for a long time. The master of the family never recovered his health, but died miserably, after languishing for three years, under disease, supposed to be caused by the lead poison.—(*Medical Transactions: Lon. vol.* 1.)

Even milk has been injured and made to acquire insalubrious properties, by being kept in leaden pans, for the use of the dairy. Mr. Parkes, (author of a work on chemistry,) expostulated with some persons in Lancastershire, who were in this habit; but, governed by selfish motives, they replied, "that leaden milk-pans threw up the cream, much better, than vessels of any other material."

Dr. Darwin relates the case of a farmer's daughter, who, being fond of cream, was in the habit of taking it from the edge of the milk, kept in leaden vessels and licking it from her fingers. She was attacked with severe lead colic, afterwards with paralysis of the hands, and died of general exhaustion.

That lead can act on milk and impart its peculiar properties to it, there can be no doubt; hence the old practice of experienced mothers, many years ago, of giving milk, in which shot had been kept for some days, as a cure for looseness of the bowels. It has been supposed, that a small portion of acetate of lead was thus formed, and that this medicine was the curative agent.

Next in order, we notice the poisonous influence of the *oxydes of lead.* These result from the union of metallic lead with oxygen and this is effected by high temperature and exposure to the air. *Litharge and red lead* are familiar to most general readers, as oxydes of lead. These prove poisonous, accidentally, as in the common lead plaster employed for medical purposes; in various processes of cookery, in which earthen vessels, glazed with the oxydes of lead, are employed; and sometimes, by design, the oxyde being intentionally added to some article of food, to destroy life, or to some kind of beverage, to improve its taste. To these

we may subjoin, with propriety, the fact, that oxydes, as well as the carbonate of lead, are largely employed by painters, and induce in them, the true *colica pictonum or painter's colic.*

There can be no doubt, that a great deal depends, in respect of the poisonous operation of lead, on peculiarity of constitution, as some painters, plumbers and printers work, regularly, for years, without realizing any serious inconvenience. The *lead plaster* has been long known, as a good application to ulcerated surfaces, and has been employed, a thousand times, without damage to the patient. But, sometimes, it is not so. The *Med. Gazette*, of Paris, for 1838, gives a case of lead colic, induced by this very agency. A man aged 41, had an ulcer on the left leg, extending almost from the ancle to the knee. After trying many expedients, the lead plaster was applied in strips, with obvious advantage. During this treatment, a violent attack of colic supervened, having all the symptoms of colic from lead. The plaster was discontinued, and the disease did not appear again. Five months after this, the patient, of his own accord, tried the lead plaster again, and with the same pernicious result. His physician calculated, that in eleven weeks, the man had used forty-four square feet of the plaster, each foot of which contained 114 grains of oxyde of lead. It followed that in all, 10 ounces three and a half drachms of the oxyde had been in contact with the denuded surface. Every one knows that the workmen in lead factories, where oxyde of lead is constantly blended with the air, are subject to colic; but in those cases, the poison enters the system very much by the mouth, although the surface, often wet with perspiration, is equally exposed.

The glazing of earthen vessels is composed partly, of oxyde of lead; and hence it results, that many articles of food are exposed to a poisonous influence, for nothing is more common in domestic economy than earthen-ware. Vinegar corrodes these vessels, readily, and thence, we have certainly, an oxyde, and often an acetate of lead, which finds its way into the entire contents of the vessel. It has often been matter of astonishment, that a pie of any sort, baked in a tin or earthen vessel, and not eaten until the next day, should be a source of disquiet to a whole family. In hot weather, all such matters run quickly into the acetous fermentation, and the lead in the solder or glazing, with the arsenic in the tin, give a clue, by which the mystery may be unravelled. In this case, how-

ever, it should be remembered, that the animal and vegetable matters may undergo some unknown change, that may give them a deleterious quality; and although the protecting power of tin over lead, by reason of galvanic agency, may be argued against the existence of any lead poison, in such a piece of cookery in a soldered tin pan, yet the fact of poisoning from this source, is beyond doubt.

Some persons make a kind of *preserve*, that has just sugar enough in it, to insure the acetous fermentation and the formation of vinegar, and this in glazed, earthen vessels. The consequence is, the production of acetate of lead, or certainly the oxyde, and the *preserved* fruit, is *poisoned.* Hundreds of persons have been seriously diseased, from this cause.

It is on the same principle, precisely, that apple-butter and pear-butter, and similar preparations, put away for safe-keeping in earthen jars, coated with lead glaze, are so frequently deleterious. Kept in well made *stone* jars, no inconvenience follows. This kind of vessel should always be preferred for keeping pickles in vinegar.

It will rarely happen, we suppose, in a land of plenty, that *butter* will be a subject of adulteration with lead. We are told, however, that *Gaubius* detected white lead in butter, in Flanders, at a time when there was a dreadful mortality among cattle, and this article, as a consequence, was very scarce. Much more frequently is cheese poisoned with lead, a fact sufficiently well known, and therefore not calling for special notice at this time. I will say however, that lead is not always the cause of poisonous effects from the use of cheese. Some years ago, in Frankford, Pennsylvania, many persons were sickened by a cheese, the appearance and taste of which were of the first order. All who ate of it, suffered. A part of the cheese was sent to me for examination, and two gentlemen in Philadelphia, performed a similar service. We sought for lead and other poisonous agents, but nothing could be detected by the most delicate tests. The opinions entertained were, that the milk was probably taken from a cow laboring under *milk-sickness;* that the source of the mischief was some unknown vegetable; or, that some spontaneous change had passed upon the cream, which was not tangible by any known means of investigation.

Sugar may be poisoned, either accidentally, or by design, with lead, in the form of oxyde, or salt of lead. A very interesting account is given by Dr. Jackson in the *Medical Magazine* for June 1835, of the poisoning of many persons, in this way, in the town of Calais, in the state of Maine. Upwards of one hundred persons were affected, with all the symptoms of colica pictonum; three died, and others suffered more or less from paralysis of the extremities. That the sugar was the source of the evil, was manifest, from the consideration, that several persons who dispensed entirely with sugar, wholly escaped, while those suffered most, who, from peculiar fondness for the article, consumed it most liberally.

Chemical examinations were made by several individuals, and the presence of lead fully established. How it got into the sugar, could not be ascertained. The conjecture is, that the juice of the cane must have been evaporated in leaden reservoirs, where a salt of lead resulted from the oxydation of the metal, and the union of the oxyde with a vegetable acid present in the cane juice. The means employed to detect the lead in this instance, will be noticed hereafter.

A case somewhat similar to that reported by Dr. Jackson, is contained in the *Transactions of the Medical Society of London*, vol. 1st. "Every member of the family was seized with lead colic, and two of the number died. What was remarkable, was the fact, that a good deal of sugar, taken from the same barrel, had been sent to some friends, who were not at all injured by it. The symptoms of the sick were so obviously those of lead colic, that not a doubt could be cherished. Every vessel and article about the house was searched in vain, for the cause of all this mischief.—At last, it was discovered, that the barrel containing the sugar had formerly been full of dry white lead, and that the present to the friends, came from the centre, while that which had poisoned, was taken from the outer portion, in contact with the white lead." This history is important, as it may serve to aid in ferreting out the true cause of poisoning in cases, which at first sight may seem to be involved in great mystery.

One of the most wicked uses of the oxyde of lead, is its addition to scur *wines*, to make them of a better taste. This is done, sometimes, merely from selfish considerations, under the impression, that the

lead employed, is too small in quantity to do harm. But it is also added, with a full understanding of its pernicious effects, and the practice is highly represensible. The liquor in its best condition, is, one might suppose, sufficiently hurtful to the morals and manners and health of the community; but the cupidity of an avaricious man is not gratified with the sale of what he calls, "sound wines," but he must turn to account, those that are actually *spoiled*, himself being the judge, and in order to *save* them, he adds a more *noxious poison.*

It is true, that the relative quantity of lead in a cask of wine, may be small. But every one knows, that the long continued use of poison, in small portions, will often destroy life, in the end. Hence, the wisdom of a remark made by *Dr. Gregory*, on intoxicating drinks, viz: "that the daily use of them, even in moderate quantities, was often much more hurtful to the system, than an occasional drunken frolic." *Accum*, has therefore said, most truly, "that wine adulterated with the smallest quantity of lead, becomes a slow poison."

But not satisfied with litharge, as a means of arresting the acescent state of wines, some sophisticators add the acetate of lead. In the *Vintner's Guide*, page 67, the author directs a lump of sugar of lead, as big as a walnut, to be added to 42 gallons of muddy and sour wine, to *cure it.*

Wine may be poisoned by the addition of a few shot, as will be seen presently. It is a very common device, to put shot into wine bottles that have bi-tartrate of potash, adherent to their sides, and by frequent shaking, to detach the latter. In the *Philosophical Magazine*, (London,) for 1819, we find the following statement: "A gentleman, who had always, enjoyed apparent good health, and who was in the habit of drinking half a bottle of Madeira after dinner, was taken ill, (three hours after thus enjoying himself,) with a severe pain in the stomach, attended with violent colic, which gradually yielded to appropriate treatment. On the day following, he drank the remaining half of his bottle of wine, and in two hours, was attacked with most violent pains, head-ache, shivering and general distress. The apothecary who was called to prescribe for the case, suspected the wine, as the cause of these symptoms. The bottle was produced by a servant, and as it slipped out of his hand, a row of shot was observed, wedged forci-

bly into the angular bent up circumference of it. On detaching the shot for inspection, they crumbled into dust. The wine had gradually produced this change, and suffered itself, in consequence; as lead and arsenic, entering the composition of the shot, were both present in the wine."

It would be well, in all countries, where wine is consumed as largely and as ruinously, as in America, if the decree of the Duke of Wirtemberg, made in 1690, could be enforced. He made it a capital offence, punishable with death, to add litharge to wine.

Not a little mischief has grown out of a well known property of sugar of lead, that leads to its employment in the laboratory of the chemist. I mean, its power to obliterate, or throw down coloring matters. On this principle, syrups are sometimes clarified with sugar of lead, and various chemical preparations are treated in like manner. Now, although, the addition of this salt, in exactly the right proportion, would insure the precipitation of all its oxyde of lead along with the coloring matter, and so prevent injury, yet that is an affair too often left to the carelessness of hirelings, to make the practice at all safe. Hence, syrups and the finer chemicals are sometimes adulterated with the lead poison, and may of course prove deleterious, from that cause alone.

The poisoning of painters, plumbers and other workmen, much employed in the use of lead or its preparations, has been adverted to. The effects are sometimes so suddenly produced, and the fatal issue occurs so unexpectedly, as to make it necessary, to determine, satisfactorily, the cause. It is important, therefore, to be aware of the power of habit, in these matters, and to be acquainted with facts that are not very common, but which may be repeated. Thus, the poisonous action of the lead has been detected, satisfactorily, in a partial palsy, induced by sleeping for two or three nights, in a room newly painted with what is called, "a dead white." The detention of a spectator in a lead factory, by mere curiosity, for an hour or two, has resulted in the usual symptoms of an attack of lead-colic. The laborers in the establishment, spending nearly all their time in the fumes of the metal, in various stages of chemical action, escape unhurt for years, simply by living chiefly on fat broths, fat meats, the use of oleaginous fluids, and the like.

T.

It is not within our power to say, how much of any given preparation of lead may be swallowed, and fail to exert a decidedly poisonous action. The reasons for this assertion are already known, in reference to other poisons. The case of the Irishman with a sore leg who swallowed nearly an ounce of sugar of lead, by mistake, is fresh in our memories. But we find in the *London Medical and Physical Journal*, for 1803, a most extraordinary case, reported by Dr. A Hunter. It is, in substance, as follows:—An apprentice lad, living near to some calico-printers who make large use of sugar of lead, procured a lump as big as his fist, weighing not less than a pound, intending to mix some of it with a poultice, which had been ordered for an inflamed ulcer on his leg. The lump was carelessly deposited on the kitchen table; and the mistress of the house, old and near-sighted, coming in with some cabbages picked for dinner, laid them on the sugar of lead, and cut the whole into scraps, without noticing the salt. The mess together with some potatoes, entered a pot of water, and the process of ebullition quickly digested the whole. The master and mistress, a daughter and her husband, with two apprentices consumed the meal.

The dinner having been disposed of, the lad set about the preparation of his poultice, but lo! the sugar of lead was missing. It was remarked, that the food had tasted, somewhat strangely, and the discovery was soon made, that their stomachs had been the receptacle of the lost article, and of course, the family exhibited marked signs of alarm. Dr. Hunter soon arrived, and gave an emetic to all the persons who had eaten the meal, save one, who, feeling no inconvenience, refused to take the medicine. Those who took the emetic were gently vomited, and there the matter ended.

In this case, about 16 ounces of sugar of lead were allotted to six persons, as they swallowed the entire meal of cabbage and potatoes. But, was the sugar of lead there, or did the coloring matters, or any thing else in the vegetable substance, entirely decompose the salt, throwing down an insoluble oxyde, which might have been emptied out of the pot, unnoticed, by an old, half-blind woman? This may have been the result, although we only conjecture about it, at this remote period. If the salt did not experience this change, and the whole was actually held in solution, the

case presents the largest portion of sugar of lead swallowed without injury, that history has recorded.*

The late Professor Barton was in the habit of teaching, that excessive doses of sugar of lead sometimes purged profusely, and in that way, protected the system, from its poisonous quality; but in the case just quoted, we find nothing of that sort.

The usual action of large doses of sugar of lead, is evidence of its *irritant* properties, and hence it is classed with *irritant* poisons.

But if it be introduced gradually into the system, it brings on, as we have seen, that painful and often fatal form of disease, called *lead colic*, and when this does not terminate in death, it is frequently followed by partial or more general palsy, and these by apoplexy. The chronic operation would seem to be evidence of *narcotic* poisoning.

When acetate of lead, or the carbonate of lead, applied to an abraded surface, brings on colic pains, as often happens in young children, they do so, without inducing any obvious local irritation, but appear to impress the bowels, through the medium of the nerves. This use of lead preparations in children, is therefore, not quite as safe, as some may imagine. I have known the mere dusting behind the ears, with dry white lead, in order to relieve a discharge from the part, to be followed, in a short time, with severe colic.

In addition to our casual notices of the mode of *detecting the presence of lead*, it is proper to devote a little further attention to the subject.

The old-fashioned *wine test*, answers very well, for showing the presence of lead, in wines. As it is easily prepared, we quote from *Accum*, the usual recipe. Mix equal parts of finely powdered sulphur and slaked quick-lime, and expose the whole to a red heat, in a common sand crucible, for twenty minutes. Thus we get sulphuret of lime, to 36 grains of which, add 26 grains of bi-tartrate

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* A young girl of good constitution, in a moment of despair, took 3 grains of sugar of lead in solution. Almost immediately she was seized with collapse and syncope, and afterward with vomiting and convulsions. Sugared water, sulphate of magnesia and sulphate of soda were given, but she died in twenty-five hours. She voided a large quantity of urine, which on careful examination was found to contain a sensible quantity of lead.—*Brit. and Foreign Med. Rev., July*, 1841, p. 249.

of potash (cream tartar). Put the mixture in an ounce bottle, and then fill with water that has been boiled, and allowed to cool. Shake well repeatedly and let the dregs settle, after which pour the clear liquor into another phial, into which about twenty drops of muriatic acid have been previously dropt. It is then ready for use, care being taken to keep the bottle well corked. If some of this liquid be added to wine, containing either lead or copper, a dark brown or black will be struck. If water, be saturated with *sulphuretted hydrogen gas*, and acidulated with muriatic acid, it is a better test, and should be preferred. It gives a black precipitate, which is sulphuret of lead, and is an extremely delicate test.

To be assured that this is truly sulphuret of *lead*, and that lead was certainly present, collect the precipitate on a filter and dry it. Then place it in a small cavity formed in a piece of eharcoal, and pass the flame of a blow pipe directly on it. The compound is speedily decomposed, its sulphur flies off, and the metal appears. If this be detached, and again heated by the blow pipe, traces of the yellow and red oxyde of lead will be seen.

Sulphuric acid and the *sulphate of soda* form a white precipitate with lead, that is insoluble in nitric acid. Thompson says, the sulphate will give a white precipitate in water, containing one hundred-thousandth of its weight in lead.

The *neutral chromate of potash* gives a beautiful, yellow precipitate, when added to a fluid containing lead in solution. This is chromate of lead.

The *hydriodate of potash*, added to a lead solution, gives a yellow precipitate of hydriodate of lead.

When the lead poison is mixed with solid matters, the plan pursued by Dr. Jackson, and others, is proper. Thus, the poisoned sugar, formerly spoken of, was burnt to a cinder in a platina crucible. The ashes were digested in nitric acid, evaporated to dryness and the dry mass dissolved in water. To the filtered solution, placed in a flask, sulphuretted hydrogen gas was added, and a copious black precipitate of sulphuret of lead was the result. Every 500 grains of sugar were thus found to contain 2-3 grains of oxyde of lead.

In *addition* to the *symptoms* already detailed, as resulting from the poisonous action of lead, we name an astringent, metallic and

sometimes, sweetish taste in the mouth; pain in the stomach; and after vomiting, obstinate constipation; contraction of the abdominal muscles; these are succeeded by a pallid countenance; tremors; occasionally, delirium; in the chronic form, paralysis is developed.

The *morbid appearances* rarely amount to more than a stricture about the colon, or a general contraction of that intestine.—But, there are seldom, any signs of inflammation.

The *treatment* requires the ejection, if possible, of all the poisonous matter, either by the stomach-pump, or by means of an active emetic, as the sulphate of zinc. Sulphate of magnesia should be administered copiously, to form an insoluble sulphate of lead, which is harmless, and also to act as a cathartic for the dislodgment of foreign matters. If this fail to purge, let castor oil be given in repeated doses, accompanied by purgative clysters. The warm bath is an important remedy to soothe the system, and to relax spasm, and so favor the due evacuation of the bowels. The free use of mucilagnious drinks is also important, and if the irritation of the stomach be considerable after free evacuations, denude the surface on the epigastrium to the size of a dollar, and apply a grain of the sulphate of morphia. Sometimes, it is necessary to reduce morbid action, by venœsection and leeches.

When paralysis of the extremities follows colica pictonum, the best treatment consists in small doses of the acetate of strychnia, and occasionally galvanic shocks. One-tenth of a grain of the strychnia is a sufficient dose to begin with, very gradually augmented until tetanic spasms are visible.

The agency of sulphuric acid, in decomposing *sugar of lead*, and so destroying its poisonous character, will be seen in the following case, extracted from the *Journal de Chimie Medicale for June*, 1839.

A girl, about 21 years of age, quite feeble and delicate, was brought to the hospital by two police officers, on the 20th of May. She had swallowed the poison, about a half an hour before. Her distress was extreme, face pale, a black circle round the eyes, the lips livid and dry, skin hot and moist, pulse feeble, threadlike, and she had hiccup.

Having ascertained what sort of poison had been swallowed, an injection was thrown into the stomach, by means of the stomach-

pump, containing about a pint of the compound infusion of roses. It was expected that the sulphuric acid of this infusion would decompose the acetate of lead and form an insoluble sulphate. Shortly after, the contents of the stomach were removed, the patient put to bed, hot fomentations applied to the thighs and feet, and several doses of camphor and ether administered. In an hour after this, an ounce of castor oil was given, which operated copiously.

Next morning, the patient had high fever and severe pains at the pit of the stomach, To relieve these, the saline mixture was ordered, leeches and a blister applied to the cardiac region. These remedies gave great relief, and she soon recovered.

The occasion of this attempt at suicide, was disappointment in a love affair. The girl bought two-penny worth of sugar of lead, at a druggists, for the purpose, as she said, of killing mice. On going home, she swallowed the whole, being, probably, an ounce.

REMARKS ON SCROFULA.

BY THE EDITOR.

(Continued from page 70.)

From the facts and reflections contained in the foregoing part of this article, it must appear, that air altered in the proportions of its constituent elements, is not of itself, as M. Baudeloque supposes, generally adequate to the production of scrofula. Nor can it with any degree of propriety be regarded as the sole or essential cause of that disease. The disorder of the chylopoetic organs, and consequently, of all the solids and fluids of the body which must necessarily result from the protracted use of a bad or an insufficient food, is fully as well calculated to produce that state of the economy, considered the most favorable to the developement of scrofula, as impure air. Nor is the effect of this latter cause upon the fluids different from that which results from the cause which M. Baudeloque looks upon as so indispensible. Hæmatosis, in both cases, must be imperfect. In the one, because of the respiration of bad air; and in the other, because of the introduction of

materials into the system, of which perfectly healthy blood cannot be made. The character of that fluid depends as much upon the nature of the chyle that is poured into it through the thoracic-duct, as upon the oxygen that is added to it during its passage through the lungs. Inasmuch, therefore, as the fluids must be altered before the solids can become affected, and as the constitution of the former depends, necessarily, upon the respiratory and digestive functions, it is not only reasonable to suppose, but it is absolutely certain, that from the failure of either of these functions to be performed properly, that habit of body must result, which is considered necessary to the production of scrofula. If either of those causes acting separately on the system, may produce this effect, as numerous facts seem positively to intimate, it is clear that their joint agency, must be much more certainly and promptly detrimental. Therefore, as those conditions of life and those localities, in which individuals are most liable to use unwholesome food and breath bad air, are the most frequent haunts of scrofula, they should be regarded as the most common causes of the disease.—To say, however, that they are the only causes of it, would be erroneous, for it is perfectly evident, that any other cause that is capable of producing a predominance of the white, and a diminution of the red fluids and tissues must be adequate to the production of Scrofula.

From this view of the causes of scrofula, it is clear that it commences in a morbid alteration of the fluids and not in the solids of the body.* But it cannot continue long confined to them. They soon cease

* Not only, as has been remarked, do the white fluids superabound in scrofulous persons, but the simplest examination of them will establish the fact, that they have become altered in their composition. In the first place, it should be stated that the saline principles which predominate in the white fluids are the phosphate and carbonate of lime, and the chloride of soda, and that it is chiefly of these principles that scrofulous tubercles are composed. We are told by M. Baudeloque, that Labillardiêre has proved there is seven times as much phosphate of lime in the milk of a cow laboring under *pommeliere*, (a tuberculous affection) as in that of a healthy one. This is certainly an exceedingly important fact, and it will doubless throw much light upon the essential nature of scrofula. Taken in connection with those causes that are considered the most productive of this disease, it will aid much in explaining their mode of action, and may furnish an useful hint in its treatment. In confirmation of the altered state of the fluids it should be stated that the greater part of the secretions in the scrofulous are more acid than the same secretions in those that are healthy.

to make a healthy impression on the solids, which consequently, become altered in their composition, and these, in their turn, ceas to act upon thefluids as they do in health. Thus, in every case we find, both inthe fluids and solids, the cause and the effect of the disease. What then, it may be asked, is the seat of scrofulous complaints? To this question, I would answer, they have no seat, they are not entities—they are merely abnormal acts of the animal economy, and therefore, cannot have a particular location. These acts are only discoverable by the disorders which take place in the functions, and consequently, it would be nugatory to seek for their seat, for from their very nature it is impossible for them to reside any where in particular. We see abnormal acts in the secretory functions. Shall we, therefore, say that they are seated in the secretory organs? No, for there is more alteration in the fluids secreted than in the organs that secrete them, and consequently it would be absurd to locate the disease there. Shall we say they are seated in the nutritive organs, because we have indubitable evidence of a perverted state of the nutritive function and an altered condition of every structure? No, certainly, and for the same reason: we have, therefore, in scrofula, a cachectic state of the whole system, which it would be absurd to assert, exists in any particular part to the exclusion of the others. Bordeau maintained, and correctly too, that in scrofulous complaints the whole constitution has experienced a manifest deterioation and has well expressed his opinion, by saying, that it is cachexia—disease *totius substantiæ.*

Under the influence of the causes which we consider adequate to the production of scrofula, all the structures become, in succession, diseased, and the secretions, consequently, become more and more vitiated. It would be useless for us to attempt to describe the order in which, the tissues become affected, for in truth, there is observed no regularity in this respect. Sometimes the bones, which as a general rule, are the last to suffer, are the first attacked, and the skin, which in so many instances, gives the first indication of disease, sometimes is not disturbed until after it has made its appearance in many other parts of the body.

That Scrofula has no particular seat, but is dependent on, or consists in, a cachectic state of the constitution, is proved by the remarkable fact, that in many instances, there is developed

what is called the scrofulous diathesis, before any indication of serious disorder in the structure of the organs, is discoverable.—This often takes place before the function of nutrition has become so perverted as to cause organic lesion in any part. Such an alteration in nutrition, however, has taken place as to give rise to a particular temperament, if I may use the expression, which clearly indicates an organic predisposition to the disease.

If what has been said of the causes of scrofula, and of their modes of action be true, no one can be at a loss to determine what course should be pursued in order to prevent or to cure it. On these points we do not profess to be able to furnish any thing particularly new, but we desire to press upon the minds of our readers the importance of attending to diet and regimen in the management of scrofulous patients.

In the first place, we must remark, there is a very erroneous impression amongst physicians, in regard to the difficulty of curing this disease; and this opinion rests on high authority, for Hufeland says it is certainly one of the most difficult of diseases to cure.—Now, this cannot be so, if what has been said of the causes which produce it is true. We can, with almost infallible certainty, prevent and cure it, if the proper course of conduct be pursued.—The principal reason, I am persuaded, why physicians have encountered so many difficulties in the treatment of scrofulous affections, and have complained so frequently of their want of success, is because they have paid too much attention to the pharmaceutical, and too little to the hygienical treatment of their patients. They have, in other words, undertaken to cure scrofula in the very places, and in the very circumstances, where it was developed, than which, nothing could be more absurd.

If we would cure this disease, we must change, entirely, the constitution of the individual that may be laboring under it, and give to him a new temperament. The system must undergo a complete renovation—it must be rebuilt with new and better materials. To attack the symptoms, would be absurd—we must begin at once with the causes. The patient must, therefore, be placed under the most favorable hygienic circumstances. If the air which he has breathed is impure, his residence must be changed to a locality where he can respire that which is pure, dry and warm. It should be on an elevation with a southern or

eastern exposure, where, with free ventilation, he may, at will, enjoy the benefit of solar heat. His clothes should be warm, and made of such materials, that while they keep up moderate cuticular action, they will prevent the suppression of perspiration. Exercise, such as dancing, running, sailing, riding on horseback, and working in the field or garden should be attended to sedulously. Without this, all other means will prove ineffectual—it is indispensable to activity of mind and vigor of body.

No point in the treatment of scrofula demands more attention than food. This should be of such a kind as to co-operate with the hygienic means which have been mentioned, as calculated to renovate and strengthen the system; or, in other words, to counteract the constitutional predisposition to scrofula—to reduce the amount, and to correct the vitiated state of the white fluids, while it increases the amount and enriches the red fluids. Animal substances, and particularly, roasted meats, as they are more stimulating, and fermented liquors, which contain more or less of alcohol, will contribute most directly to the accomplishment of this purpose.—For the same reason, vegetables should be avoided. They do not seem adapted to the scrofulous constitution, having but little, if any tendency to accomplish any of those objects, which should always be kept in view in the treatment of this disease.

I confide in no medicine acknowledged by the profession, to be efficacious, and it is not at all certain, that I use one in which trust should be reposed. Further observations, however, on the subject will decide this point. But of one thing I am certain,—if there are any medicines that will prove serviceble in the treatment of scrofula, their tendency must be to increase, and not to diminish, the tone of the stomach.—They must aid and not embarrass that organ in the performance of its functions. The constitution must be renovated—every atom that enters into the structure of the tissues must be removed, and this can never be done, unless the stomach is able to extract from the food a sufficiency of wholesome nourishment. Often it will languish in the performance of its duty, and then it must be sustained by occasional appropriate stimuli. Without this, it would fail utterly in introducing into the system such an amount of proper nourishment as is necessary to effect its renovation. As the new materials take the place of the old and effete matter, the system will improve in strength, and the stom-

ach in common with the other organs, and ultimately, it will be able to perform its duty without assistance.

Here let me make a remark in regard to dyspepsia, a disease which, I am persuaded, is more misunderstood than any other of as common occurrence. It is considered a disease of the stomach, when, in fact, it is, when confirmed, as much a constitutional affection as scrofula is itself. Low diet and aperients are the most popular remedies. Now, I ask, do these remedies cure? No: they merely palliate, as is proved by the fact, that the moment dyspeptics cease using them, they suffer afresh all the agonies of indigestion—the moment they venture upon the ordinary articles of diet, they are assailed again by the Protean demon, with all his unmitigated fierceness. So long as they limit themselves to water gruel and a blue pill daily, they enjoy a vegetative existence, and nothing more, and yet we constantly hear physicians declare that, such individuals are cured. How ridiculous! a man cured, who is obliged to live on water-gruel and mercury. It is absurb to say a patient is cured of dyspepsia, until he is able to go to the table and live as other men do, and this he will never be able to do, until his constitution is renovated. Sustain the stomach in digesting and not in fasting–and this will soon be accomplished. Beaumont and Fletcher say "what a blessing did God bestow on man when he did give him a good stomach," but this he will not be able to keep, unless he gives it due exercise.

We are aware, that the invigorating treatment which we have recommended, will be objected to by those whose minds are haunted by the idea, that scrofula is not a cachexia, but a specific irritation which is attended by, what is called, scrofulous fever. Now this fever is purely imaginary—it has no real existence, but has served to lead physicians into the grossest absurdities. Let us examine Hufeland's account of scrofulous fever, and we shall see that he has not recorded a single symptom incontestibly febrile in its character. The pretended characteristics of this fever, as given by Hufeland, run through no less than nine paragraphs.—In the first, he says, *it makes its appearance most generally, during the two first years of life:* this is true of scrofula, but it is no evidence of fever. Secondly; *it is very irregular;* its *progress and type are indeterminate;* these are only negative signs. Thirdly; *It is very variable in its duration; in some cases there are*

but few paroxysms which are followed by a long intermission; in others they continue for several weeks, but they are moderate; these are merely accidental circumstances, and not characteristics: he has not still informed us in what this fever consists. Fourthly;—*There is little or no heat, but it experiences a slight increase periodically; the cold is more sensible.* In all fevers, the phenomena indicative of reaction of the circulatory and nervous centres are indissolubly associated; it is, therefore, of much importance to attend to the variations in animal heat. When, therefore, these variations are scarcely if at all, observable, it is a strong presumption in favor of the idea that there is no fever. Fifthly;—*There is frequently derangements of the digestive functions, and particularly a disposition to acidity.* This, no one will deny, but these indications of disease do not constitute the febrile state; these scrofulous diseases of the stomach, cannot, in any sense, be viewed as characteristics of fever.—Sixthly: *It is not uncommon to see the fever accompanied by a pituitous cough and a rather loud respiration; this latter circumstance proceeds from the passage of air through bronchial tubes lined with mucous.* These statements are indisputable, but they relate to circumstances that are entirely accidental, and have no necessary connection with fever, and cannot, therefore, be regarded as characteristics of fever. No one denies that in scrofula, the secretions are vitiated, and that mucus is poured out in great abundance. No one denies, that such derangments of function are observed in fever, but no one will admit that they are peculiar to, or characteristic of that disease. Seventhly; *The abdomen is always somewhat tumid;* true, but no circumstance is more common in scrofula.—Eighthly; *Aperients and purgatives produce some relief, but they are only palliative;* this is no sign of fever, and moreover, it often happens that instead of palliating, they exasperate. Nor is this surprising, when we reflect, that the tumifaction of the abdomen is owing to engorgement of the mesenteric glands, and chronic inflammation of a specific kind, which purgatives must necessarily exasperate. Ninthly;—To the febrile symptoms which have been enumerated, scrofula succeeds without our perceiving it. In this brief analysis of the symptoms mentioned by Hufeland, we have not been able to find a single one that has any claim to be considered febrile, and yet he adds that scrofula supervenes upon them without our perceiving it. I venture, however, to say there is

not a physician at all acquainted with the subject that does not recognize amongst the symptoms enumerated, many that are clearly indicative of scrofula, although they are regarded as nothing more than the premonitories of that disease. Who does not know that a child is scrofulous when the abdomen is enlarged,—the limbs small, —the respiration difficult from congestion of the bronchial mucus membrane, and the abundant secretion of mucus,—the digestion slow and difficult, etc?

Thoughts on the Effects of certain Corporeal and Mental conditions of Parents on the Sex of their Offspring. By DAVID PORTER, M. D., *of Rostraver, Westmoreland County, Penn., in a letter to the Editor.*

DEAR SIR: I observe with pleasure, you have commenced the publication of a Medical Recorder. Without any personal acquaintance with you, and without any intention to flatter, I may say that my knowledge of you and your writings, induce me to hope for something, not only substantially useful, but what too many of our medical journals have failed to be, *permanent.* I propose to furnish you with some scraps for publication, should you think them worthy of it.

It may be proper to premise, with regard to myself, that I have now been a practitioner of medicine, considerably over twenty years, and during this time have been, to say the least, a careful observer of facts, both as they related to health and disease. It has been my habit to arrange and record whatever seemed likely in any degree, to throw light on the laws of life and organization. Accordingly my note book now abounds with facts, observations and experiments, some of which, it is hoped, may be deemed worthy a place in your Recorder.

One of my last communications to any journal, was published in a Pittsburgh paper, devoted in part to Agriculture. In that were offered as a matter of agricultural interest to farmers and breeders, some remarks on certain circumstances, of parents that seemed to influence the sexes of offspring. As the paper had but a very

limited circulation, and as the views there advanced, have been much strengthened by subsequent observations, and moreover as they will have at least, the interest of novelty to some, I will ask the liberty at present to bring the substance of them before your readers, reserving details for another communication.

The general result of my researches on this subject, then, is that weakness of body, and apathy, or divided affections in a parent, tend to induce identity of sex in offspring; while health of body and concentrated affections tend to repel it. Or perhaps, the idea may be better conveyed, by supposing that the exertions of each parent at the time of union, instinctively tend to produce the opposite sex, and consequently, that the efforts of the parents having the greater amount of the necessary conditions, are successful.

In the communication, alluded to, I have stated my observations on horses, cattle, sheep, hogs, and even fowls. Old horses, for example, with young mares, or horses having too many mares, or what amounts to the same, having mares in too rapid succession, are apt to have horse colts, and for the same reason, old bucks, or bucks, with too many ewes, are apt to have a great majority of male lambs, and vice versa.

Among our own species, although we are not permitted to become acquainted with varying and transient circumstances of feeling, while they divide the matter, render it uncertain to us, yet we occasionally have access to others sufficiently clear and abiding for our purpose. Of the effect of old age in either parent, inducing identity of sex, notice was taken, and some statistics given a few years since, by a German writer, whose remarks, I have unfortunately mislaid, but they corroborate my own.

Feeble health, *ceteris paribus*, in like manner induces identity of sex. Polygamy, by dividing the affections does the same. Persons of very loose habits having prolific intercourse with the virtuous, attach their own sexes to the offspring, and hence, in a very large proportion of cases, where innocent, but affectionate girls, are seduced by rakish young men, the issue is male; so far as my observations go in the latter case, the proportion will be at least four cases out of five. Handsome young men, marrying widows, old maids, or homely girls, from motives of interest, retain the sex of the offspring.

Drunken men, unless, where their wives have greatly the ad-

vantage in constitutional vigor, have female children; but this, I presume, may be owing in part, to a kind of artificial life and lust on the one hand, and in part to disgust on the other.

Such are the results of my observations, and where the circumstances, alluded to, have been strong and clear, I have generally been able to surprise the old matrons by successfully guessing at the sexes of children before their birth. Although we can give no efficient cause for all this, we may trace the final cause to the care of Nature in preserving species. By giving the sex to the party most needing it, that equilibrium will naturally be maintained, on which the continuance of species depends in all grades of beings.

If our view is correct, that difference of sex in offspring depends on accidental circumstances attending the procurative union, it must follow whatever theory of generation we may adopt, that the original germs are susceptible of either developement, and this is clearly sustained by the correspondences of the sexual organs.—Without noticing the mistakes into which authors have fallen, in making comparisons between the sexes, or entering into any controversy on the subject, at present, let us turn for a moment to these correspondences. All will admit that the same original might be converted into either a male mamilla or a female mamma, and yet scarcely less clear, are the correspondences of the several parts of the organs of generation.

Thus, we can see no reason, why different developements might not convert the same original into either a uterus with fallopian tubes or a prostate with vesiculæ seminales; and another become either an ovarium connected by an ovarian ligament with the uterus, or a testis with its vas deferens leading to the prostate. One part may become a round ligament descending from the ovarium and often indicating its identity by a peritoneal *cul de sac*, or furnish cellular substance and cremaster muscle for a spermatic cord. One part might form a connexion with the uterus, and become a vagina, or sliding down in its *cul de sac* condition from between its sphincters and corpora cavernosa, or rather corpera spongiosa, leave them to become respectively, ejaculators and corpora spongrosa urethræ; and thus become itself a scrotum. The inversion in the case would naturally call into requisition those duplicatures, called nymphæ, hymen, &c. Again might not the same part eith-

er dwindle into a clitoris, or become a penis. Cowpers glands exist in both sexes.

All these great points of sexual distinction, present not only obvious resemblances, particularly, in the early months of fœtal existence, but receive their nerves, bloodvessels, &c. from the same sources. We find the pudic nerve in both, divided into two branches. A superior in the male runs along the dorsum penis to the glans and prepuce; in the female, it traverses the clitoris in the same way. The inferior in the male supplies the scrotum dartos, and parts about the neck of the bladder; in the female it shoots along the labia to the mons veneris, supplying the corresponding parts as it goes.

The external spermatic nerve from the lumbar, together with the internal, from the sympathetic may be traced to the labia pudendi of the female as well as to the scrotum of the male; and if they cannot be found in the ovarium, they are also very indistinct in the testicle, although they are easily traced in the cord.

Even the arteries in their distribution indicate the same relationship. The spermatic artery, for example, which in the male supplies the testicle and cord, in the female supplies the ovarium and round ligament. The pudica externa, which in the male supplies the scrotum, in the female supplies the labia pudendi, and to some extent at least, the vagina.

Those mal-formations of the genital organs which have been referred to hermaphrodism, are strongly in favor of the doctrine that male and female organs are but different developements of one original. And that the view now taken of the correspondences of organs is correct, may be inferred, from the fact, that both developements of the same original, are very rarely found in any one individual. I have never more than once read of the co-existence of a uterus and prostate gland, and never, so far as I remember, of an ovarium and testicle on the same side, or in fact of any other co-existence of the corrresponding organs as above given. Such however, may occasionally occur as other duplicates of single organs sometimes do. For what other purpose than for a contingent convertability is the testicle placed in its original situation?

It would seem that no new organ is ever added to the germ. The rudiments of all are found in it, and are variously developed, but neither created nor obliterated by growth. It is true that several of

the organs are useful in the developements; but of what use we might ask are the round ovarian ligaments in the female or the mamillæ in the male? Why is the marsupial bone found in the male opossum, or the bifid clitoris in the female?

But to return to hermaphrodites. The most frequent of those deviations is probably that in which the subject obviously inclines to be male, but in which the vagina is not fully evolved, or, in other words, not fully converted into a scrotum. It remains more or less tucked in, and consequently, can only receive the testicles into what continues to be labia pudendi. When we connect this fact with the little resemblance between the scrotum and true skin, and its analogy with the vagina, not only in texture but even in its rugæ, raphe, &c., our convictions become still stronger. A case is recorded by M. Rudolphi, in which the uterus showed a follapian tube and an ovarium on one side, while a testicle sent up its vas deferens on the other. And a still more striking case of the mutual convertibility of these parts, is recorded by Dr. Davidge, of Baltimore.

The supposition involved, that the uterus, although originally distinct, unites with the vagina and opens into it in the course of female developements, is certainly not contradicted by any thing in the appearance or structure of the organs. On the contrary, my impression is strong that Dr. Wistar, Dr. Pattison, or some other anatomist, in my hearing, asserted in the course of his demonstrations of these parts, that by maceration or putrefaction, an overlapping of their mucus membranes, and perhaps other marks of original distinction might be detected.

M. Andral says that "during the earlier period of the evolution of the fœtus, as in the lower classes the of animal kingdom, there is only one sex, namely, the female." My views at once explain this allusion.

JANUARY 11, 1842.

FACTS IN RELATION TO THE GROWTH OF HAIR IN EXTRANEOUS SITUATIONS.

BY THE EDITOR.

A GIRL, about thirteen years of age, was, some weeks since, brought to this city, from the ball of whose thumb, it was said, hairs frequently issued. These, it was stated, were various in length and texture—some being very fine, and others almost as coarse as hogs bristles. She inspired so much interest, that to gratify curiosity, hundreds visited her, amongst whom, were several very respectable medical gentlemen. This continued for several days, and in the mean time, very extraordinary rumours were afloat in the community in regard to the length and rapidity with which the hairs emerged from the prolific part. In this, doubtless, there was much exaggeration. We did not vsisit her until after it had been said, that she had been detected in placing hairs under her thumb nail; and then we called upon her, but for a very different purpose, than that which had prompted the hundreds who preceded us.

Many of those that visited her, and kept her under the strictest *surveillance*, for hours, and who are, doubtless, qualified to give testimony in regard to so simple a fact, declared in the most positive manner, that they had distinctly seen hairs issue, not from under the thumb nail exclusively, but from various parts of the ball of the thumb, and that it was impossible for them to have been deceived. Such was the testimony of more than a dozen highly intelligent men. When, therefore, we were told that the girl had imposed upon the public credulity, and that too, to an extent almost without a parallel amongst the tricks of the most dexterous jugglers, we shall be believed, when we say, that we were perfectly astounded that so many intelligent men should have been cheated by a trick, so gross and palpable, that the most careless observer should have, in an instant, detected and exposed it.

Finding that this case had excited a degree of interest to which we did not think it entitled, and not wishing it to go abroad that we considered it a perfectly unprecedented affair, we stated to the medical class, that we had not seen the girl—that we knew nothing personally, of the issuing of hair from her thumb, and, therefore,

we could not vouchf or its truth; butthat if true, it was not of so extraordinary a nature as to entitle it to the interest it had inspired, or the importance which the public had attached to it; and further, that there was but little sense or science in declaring, as some, in earnest, did, that it must necessarily be an impostion, as such a thing as manyprofessed to have witnessed, was anatomically and physiologically impossible. In proof of the above assertions, we quoted many casesof the growth of hair in accidental and unnatural situations, andalthough we did not adduce one precisely of the character of that which it was said, was then exhibiting in this city, we succeeded in establishing the fact, that the formation, of hairs in uncommon situations, is one of the most frequent anomalies that occursin the animal economy.

Immediately after these statements were made to the medical class, I believe the very same day, it was reported that the imposition had been detected. This may be so; but to say the least of it, the proof of its truth is unsatisfactory and inconclusive.

Soon after the above occurrences, the following editorial appeared in the Louisville Journal, a paper acknowledged to be the organ of the Louisville Medical Institute, some of the Professors in which, entertain, it is true, no friendly feelings towards the writer of this article, but who, I should suppose, from the stations they occupy, would be ashamed to encourage so contemptible a means of annoyance. After stating that the imposition had been detected, it is said:—

"All, or nearly all, of the Lexington doctors, it appears, were hoaxed; and of course most of them expressed the greatest suprise at the supposed phenomenon. "Pooh! Pooh!" exclaimed Professor C., of the Lexington medical school, with an air of the most indescribable superiority: "I am astonished that the case of this girl is new to my brother physicians. There is nothing at all novel about it. Why, sirs, the books are full of instances of the shooting of hair and bristles from the thumb, the toes, the palm of the hand, the bottom of the foot, and every other part of the human body."

"A day or two after this speech, the hoax was exposed. The laugh at the learned professor was, of course, universal. We understand, however, that he has had the effrontery not to run away."

Whether the sentiments I held in regard to the case, to which reference has been made, are sustained by the facts on record, and whether those abroad, as well as those at home, have most cause to exult at the blunder, they suppose, I have commilted, or to blush for their ignorance of things with which they should have been fami-

liar, shall soon appear. I found in the records of Natural History, and not in the *ridiculous story of stupid negroes*, a satisfactory explanation of the pretended "*shower of blood*," that occurred in Tennessee, and now wish to show that I am quite as familiar with the facts of medical science, as those who have the presumption to laugh at my ignorance. This I do, not because of the interest or importance of the subject, but because it is proper and necessary, that I should be set aright in public opinion.

Hair has been found in cysts more frequently than in any other preternatural situation; the interior membrane of which has been supposed to resemble, in its organization, that of the skin. In the works of Cruvilhier and Meckel it will be seen, that hairy cysts have been found under the skin of the head, in the ey-lids, neck, uterus, omentum, liver, in the interstices of the muscles, and even in the brain. The developement of hair in cysts is not very common under the skin; most frequently it has been observed in the ovaries, and when in these organs, there is reason to suspect that it may be the remains of a fœtus. This idea is strengthened by the fact that hair found in those situations, exist in conjunction with teeth, and even bones, and that the women in the bodies of whom this observation has been made, were not virgins. This, however, has not always been the case, for instances are recorded by J. F. Meckel, of hair having been found in the ovaries of girls, who had never menstruated, and who presented all the physical signs of virginity. One of the most singular cases of this kind, is that communicated by Dr. Baillie, to the Royal Society, in the year 1788. The young subject of the case was not more than twelve or thirteen years old, with an infantine uterus and perfect hymen: and the fætation consisted of a suetty substance, hair and the rudiments of four teeth. The same kind of formative ludibra are found, also, in mature life in women of the most correct lives, and where chastity has never been impeached, of which we have an instance in a vol. of the Transactions of the Medico-Chirugical Society. The subject, an unmarried female, was about thirty years of age, at the time of her death, which took place after a long series of suffering, accompanied with great pain in the region of the bladder, and a considerable swelling of the abdomen. On examining the body, a large tuft of hair, of about the size of a hen's egg, was found enclosed in a tumour of the left ovarium, surrounded with a fluid of the thick-

ness of cream. In the bladder was traced a similar tuft of hair, surrounded with a like fluid, which distended and plugged up the organ. Such rudiments of organized form have been found in other situations, and under circumstances, too, that exclude the idea that they resulted from the ordinary generative acts. Thus, Dr. Huxham gives a case, in which the rudiments of an embryo were found in a tumor, seated near the anus ofthe child; and Mr. Young, a still more extraordinary one, yet a case well known, I suppose, to nearly all well informed physicians, of a large protuberant cyst, containing a nucleus of fœtal rudiments found in the abdomen of a male infant, about fifteen months old. The child died, after a tedious and painful illness. The body was opened, and the cyst examined: "The substance it contained," says Mr. Young, "had unequivocally the shape and characters of a human fœtus." It is stated by some anatomists, that hair is oftener found in the left, than in the right ovarium; but this is doubted by Morgagni, and Meckel. Indeed, according to the researches of the latter anatomist, it is found triple as often in the left, as in the right.

Several authors having found hairs in fatty tumors, without roots, and not adhering to the walls of the cysts, but confusedly mixed with fatty matter, concluded that they were analogous to fat, and have even gone so far as to contend, that they were produced by its inspissation. This was the opinion of Tyson and Morand, of the Academy of Sciences, and it is certainly remarkable, that wherever cysts have been found containing hair, they always, also, contain a fatty substance. Bichat says, that those cysts in which hair is found, contain a number of distinct balls, that are formed of a whitish, fatty substance, which is, however, very different from ordinary fat. On their internal surface were implanted numerous hairs, which the slightest effort was sufficient to extract, as they scarcely penetrated beneath the superficies. These hairs were black—many were already detached and intermingled in the balls of fatty matter.

Hair, in preternatural situations, frequently exist in the interior of the organs, without sensibly interfearing with the general health. It is recorded of a woman, that she enjoyed excellent health for more than twenty years, after the first appearance of tumours, in which hairs were found. A very interesting fact was communicated to Cruvielhier, by Dr. Vallerand de la Fosse, of which the following

is a brief analysis. A woman, about forty-five years of age, entered the Hospital de la Charitè, in May, 1815. She had suffered from a fistula, which corresponded with a tumor in the lower part of the abdomen, and from which escaped a yellowish, sanious pus and occasionally white hairs of considerable length. The patient was thin, pale and exhausted by slow fever; the abdomen was voluminous and felt hard on pressure. She died two months after her entrance into the hospital. When the body was opened the fistula was found to communicate with a large pouch that filled the pelvis. This pouch was closely united to the posterior surface of the uterus, and seemed to form a part of it; it corresponded posteriorly to the rectum and appeared to have been formed at the expense of the right ovarium, of the existence of which there was no trace. It was filled with a yellowish sero-purulent fluid, and at the bottom of it there was a solid mass of the size of the fist, formed of entangled hairs that were united together by whitish matter. These hairs were of various lengths; some of them were more than a foot long and some of them presented very distinct bulbs. The internal surface of the pouch was covered with very short hairs, that were implanted in it. According to M. Cruveilhier, Maurice Hoffmann was consulted by a patient, 24 years old, for whom a sugeon had just opened a tumor, that was situated beneath the right ear. This tumor, which had, been forming two years, contained a matter resembling honey and a meche of hair of a darker color than that of her head, which grew from the part of the pouch that was applied to the temporal bone. The patient and all of her friends, believed it the work of sorcery; but Hoffmann showed them that the formation of these hairs was very natural, and was owing to ovoid bulbs in which they were implanted.

The presence of hair on the mucus membranes cannot be considered a very uncommon phenomenon, if we admit, as worthy of credit, all the examples of it that we see on record. Next to cysts, they are the most frequent preternatural situations in which hair is found. It is said that exotic hairs have grown on the tongue, in the pharynx, stomach, small bowels, rectum, kidneys, bladder, gall-bladder, uterus and vagina. Bichat, says he has seen, in one instance, a dozen hairs, about an inch in length, in the gall-bladder, which evidently grew from its surface. Dr. Hamelin, of the State of

New York, records the case of a woman 24 years of age, who, six days after delivery of a dead child, was attacked with puerperal fever and in twenty days died. The bladder was very much distended and about the half of it in a state of mortification. It contained a fetid and thick matter, with which hairs were mixed.—These hairs were united with an oval mass, which adapted itself to the form of the bladder, and with the matter which adhered to it, was five inches long, and three broad. When the hairs were washed, cleaned and dried, they weighed two drachms. When the tumor was opened, they found in it an osseous substance, and another, very small in size, that resembled that of the brain. The hairs were from four to twelve inches in length. Of all the examples of hair growing upon the mucus membrane, that which is to be found in the 46th volume of the *Journ. Gen. de Medicine*, is the most extraordinay, and the most circumstantially detailed. A woman, 34 years of age, suffered habitually from very intense colics, which ultimately extended in the direction of the rectum, in consequence of which, there issued from the anus a meche of hair. The fæces, and even wind were voided with extreme pain, which was chiefly felt in the superior part of the rectum. Three months after its appearance externally, this meche had grown to be six inches long. It was cut off afterwards, every two months, in which time it would become several inches in length. This disease lasted thirteen years, at the expiration of which time, there was a discharge of puriform matter from the anus, which ceased and was followed by constipation, colics and ultimately by a defecation which carried away the tuft of hair; a few days afterwards the woman died, but upon dissection, no organic affection of the bowels—no vestige of the singular hair production was found.

Hair has been known to grow in various other preternatural situations. Thus, it is said by M. Ollivier, that a young lady of very fair skin and deep black hair, who had been for some time convalesing from a chronic gastro-enteritis, one day, perceived, that the whole surface of the body and extremities were studded with numerous small pimples, very much like those that result from the impression of cold. After the lapse of a few days, these small elevations appeared to be colored and there was observed upon the summit of each, a hair which, at first, was very short, but which grew rapidly, and in the short space of a month, the whole of the

body, with the exception of the hands and face, was covered with hair. This accidental developement of hair, is the more remarkable, as the production of the piliferous bulbs took place simultaneously throughout the whole extent of the skin. These hairs were at least an inch in length, very black and stood very close together. We are told by M. Villermié, that he saw at Poitiers, in 1808, a child, about seven years of age, who had a great number of *Nævi materni*, which varied much in size, scattered over the whole body, except the hands and feet, all of which were covered with hair that was shorter and not so coarse as that of the wild boar, but which resembled it very much. These hairs, and the spots upon which they grew, occupied about a fifth of the surface of the body. Bichat says there was a man exhibited at Paris, who from birth had the face covered with hair like that of the wild boar. When he was thirty-six years of age, there supervened that particular species of Elephantiasis, in which the skin of the face becomes very much thickened and he presented the features of the lion. This two-fold circumstance gave to the expression of this man an air of ferocity, which it is impossible to describe. Boyer was in the habit of speaking in his lectures, of the case of a patient, who labored under an inflammatory tumor of the thigh, which part, in a short time, was covered thickly with long hairs, although, before, it had been deprived of them.

The nature of the murbus pilaris of Hust, the malis à crinonibus of Etmuller and Sauvages, and the malis gordii of Good, is involved in much uncertainty. Dr. Good says that in this disease, the skin is infested with the hair-worm, which chiefly insinuates itself under the cuticle of the back, or limbs of infants. The fibrils that are thrown forth from the surface of the skin, are accompanied by pricking pains, emaciation and, at times, convulsions, and are supposed, by some authors, to be a morbid production of real hairs. Hoffmann tells us that the children of Misnia are much infested with worms of this kind, which he describes as resembling black hairs lodged under the skin: which by a perpetual irritation, so emaciate them that they become little more than living skeletons. When the skin is warm they appear, but while cold they keep buried under its cover. A similiar disease is said by M. Bassignet to have been peculiar, in 1776, to the town of Seyne and its neighborhood, and to have made its attack upon almost all new-

born children. In Seyne, it was at that time called cées, a corruption of ceddés, a provincial term for bristle. It appeared from the first twelve hours, till the end of the first month after birth, rarely later than the last period. Friction with the hand over the body proved a certain cure, and brought forth a kind of dark rough filaments, resembling hair, often not more than the twelfth of an inch in length, in some cases, furnished with a minute bulb at the extremity.

The facts, to which we have referred, are sufficient to prove not only that hair grows in extraneous parts, but that it has been a very frequent occurrence and that so far from regarding the case which was exhibited in this city, if as genuine as it is said to be false, as a perfectly unprecedented phenomenon, we were justified in declaring, as we did, that it was not very extraordinary. Under this impression, we shall close this article with an extract from the Medical Examiner, in which is embodied the opinion of its able editor, in regard to the case to which we have, so repeatedly, referred. After commenting upon the supposed fact discovered by Dr. Pitschaft, "that the nails do not grow during the union of the fracture," which it appears he does not believe, he goes on to say:—

"Under the same head we should class the story of the young girl at the West, who was said to have discharged certain hairs from beneath the thumb nail, and whose case has recently made much noise in the journals as a wonder, though now known to have been an innocent imposition. Had the "phenomenon" really occurred, it would have been nothing remarkable, as the dermoid tissues is every where capable of producing the secretory apparatus necessary for the formation of hair; and any part, even of the internal mucous surfaces, if it could be kept dry and exposed to the air consistently with continued life, would be speedily transformed into skin; a fact well known to all physiologists. We have seen hairs growing pretty abundantly upon prolapsed and transformed mucous membrane in an old case of prolapsus ani.

W

MONTHLY PERISCOPE.

Varicose Veins treated by the Needle and Twisted Suture.—The remarks of T. B. Peacock, Esq., of Edinburgh, are interesting and important. He says:—

"I was first led to make trial of this plan from reading the report of a case by Mr. Melvin, in the No. of the London Medical Gazette for July 7th, 1838, and I have since applied it myself, or seen it made use of by the surgeons to the Chester Infirmary, in at least thirty cases, of several of the most important of which I have retained notes. The plan adopted has been that recommended in the paper referred to, of passing a common curved suture needle under the vein, constricting it with a thread in the figure-of-8 form, and having turned the needle on its side, retaining it there by straps of adhesive plaster: at the end of two or three days, the ligature, if only moderately tightened at first, will require to have a fresh one passed over it; and in two or three more the needle may be removed. Several different methods have been proposed for effecting the obliteration of the vein by the needle; but this, which was originally introduced by Velpeau, as being the most simple, is that which I have always adopted. The length of time which it will be necessary for the needle to remain, will depend on whether it is intended simply to excite suppuration, or to ulcerate out; the last being the course which I have usually followed, as in one or two instances, in which the needle was withdrawn after exciting suppuration, the obliteration of the vein was found not to have been effected."

This treatment has been applied in "small irritable sores remaining after the bursting of large varicose sinuses, inveterate ulcers connected with a generally enlarged condition of the veins of the limb, and œdema of the leg and ankle, either simple or attended with a serous discharge from the skin; and in all of the cases but two in which I have seen it had recourse to, the results have been most satisfactory; and in these, as only one needle was inserted, and other sinuses were left unobliterated, success was hardly to be expected. The number of needles which I have generally seen inserted, has been three or four in each limb; but, in some instances, five or six have been applied; the rule adopted having been generally to insert in a case of varicose ulcer one under each enlarged vein, an inch or so below the ulcer, and again on each trunk a few inches above it, selecting for the points of their insertion the largest sinuses. Sometimes I have adopted the plan mentioned by Mr. Dodd, of placing on each vein two needles an inch or an inch and a half apart, so as to effect adhesion of the sides of the intervening tract; and n these cases the main trunk will, after the cure is effected, be often

found contracted to a firm cord up to the point at which the next large vein communicates with it; while, where a single needle only is inserted, the portion of the sinuses around is often not affected by the operation.

"The effect produced on the sore by the obstruction to the course of the large veins in connection with it, is often most rapid; the inflamed margin gradually subsides, the edges become depressed, granulations spring up, and cicatrization quickly succeeds; and sores which have been liable to bleed, entirely lose that tendency, the granulations becoming firm. I have, however, observed what has been noticed before by Mr. Dodd, that the healing process was not equally rapid throughout, the good effect produced by the needles sometimes gradually subsiding, and considerable difficulty being experienced in obtaining the entire healing of the sore.

"In this way ulcers which had long been under treatment, without deriving any advantage, have, in several instances, been cured, and others, which were found to return as soon as the patient resumed his work, have, by the aid of a laced stocking, been kept healed; indeed, not only does it appear to be a rapid method of effecting the cure of these cases, but I am inclined to regard it as also a more permanent one."

Dr. Peacock concludes his article by remarking:—

"I have now nothing further to add, than that additional experience fully confirms the opinion expressed of the safety and rapidity of the cure of disease dependent on varicose veins, by the plan referred to, and I have reason to regard it as also a permanent one, care being of course taken to support the limb by a laced stocking or bandage, as otherwise the same cause which first gave rise to the varicose condition of the veins will lead to the dilatation of fresh ones.—*London Medical Gazette.*

Phthisis treated with Arsenical Cigarettos.—Professor Trousseau thinks because a disease has hitherto proved rebellious, that it should not be abandoned to itself, and upon this principle he has acted. Many remedies have been tried by him in Phthisis without any decided benefit. The use of Arsenical Cigars was suggested to him in the following manner:—

"A physician from one of the departments called upon me to say that he had discovered a method of curing pulmonary consumption, and to request me to entrust to his care some patients to try the effects of his medication under my inspection—adding, however, that he meaned to make *une affaire* of his discovery. I could not accede to such a proposition, unless upon the distinct understanding that every thing should be made public. At first he assented to my wishes, but afterwards drew back, confessing, however, that his remedies consisted chiefly in irritating fumigations or inhalations. Acting upon this hint, I have tried a variety of means in this way, and among others, little cigars impregnated with a minute proportion of arsenic."

The following is the professor's description of the way in which arsenical fumigation was employed by him:—

"I dissolved one or two *grammes*—a *gramme* is equivalent to nearly 15½ grains—of the arseniate of potash in 10 grammes water; two grammes of the solution were then poured upon a sheet of paper, and when this was well wetted, it was allowed to dry. Of this prepared paper a number of small *cigarettos* were made. The patient is advised to draw in a large mouthful of the smoke, and inhale it as deeply as he can, so as to cause it to penetrate into the bronchi. The effort causes a good deal of coughing at first, but becomes gradually more and more easy. The inhalation is repeated two, three, four, or five times, according as the patient can bear it."

M. Trousseau administers at the same time minute doses of arsenic internally, and strongly recommends the simultaneous use of hemlock plasters—the extract spread upon diachylon plaster—on the chest. He narrates two or three cases, in which the use of these means appeared to exert the most pleasing effects in mitigating the symptoms, and in decidedly arresting the progress of phthisis in its advanced and hectic stage.

"We do not pretend," concludes our author, "to cure tubercular disease of the lungs with arsenic; all that we maintain is, that it is by means of it that we are enabled to modify the constitutional symptoms, and greatly improve the general health of the patient, so that life may not only be rendered more comfortable, but may be considerably prolonged."—*Gazette des Hopitaux.*

The declaration of Professor Trousseau, that he does not pretend to cure tubercular disease, contrasts rather strikingly with his previous remark that he has "no doubt as to the curability of tubercles of the lungs."

Phthisis.—The following remarks on the treatment of Phthisis are so judicious and sensible, as well as so much in conformity with the course we have constantly pursued, and which has been laid down in a previous number of this Journal, that we cannot deny ourself the pleasure of placing them before our readers. They originally appeared in the *Gazette Medicale de Paris*, and have been translated, transferred to, and commented on in the *Medico-Chirurgical Review.*

Emetics are certainly among the most useful of all remedies in the earlier stages of the disease. The less advanced that the disease is, and the more *chronic* it is in its character, the more benefit may be expected from a judicious administration of emetics. Many a case, in which there could be little doubt but that tubercular disease of the lungs was developing itself, has done well under this practice, in conjunction with the use of other appropriate means, and all the symptoms of the impending mischief have been arrested; even in old chronic cases,

where there was a marked dulness on percussion under one or both clavicles, but where there was no sign of softened tubercles or of vomicæ, the most pleasing results have not unfrequently been obtained. On the contrary, where the disease is acute, or accompanied with feverish irritation, emetics have not produced the same amount of benefit; and no permanent advantage can be expected from their use, when the hectic fever is fairly established, and the strength of the patient is much reduced. The emetic should be taken by the patient early in the morning, before breakfast, and while he is still in bed, so that he may have an hour or two's repose after the fatigue of the vomiting. It may be repeated every morning, or only every second or third one or so, for several weeks. Generally the patient feels more comfortable on those days on which he has been vomited, and the cough and other symptoms are decidedly mitigated.

"A full dose of ipecacuan, either alone or combined with a few grains of sulphate of zinc, is as good a formula as we can employ.

"*On the whole, emetics are certainly the most eminently efficacious remidies which I have seen employed in the treatment of incipient phthisis, and, in conjunction with other means, they seem to hold out the promise of, if not curing, certainly arresting the progress of the disease.*

"*Sanguineous Evacuations.*—In phthisis, unaccompanied with an inflammatory affection of the lungs, or of the pleura, or with hæmoptysis, we should certainly avoid any depletions of blood. Much mischief has been done, both in former times as well as more recently, by having recourse to cuppings, leechings, and even bleeding from the arm, in almost all cases of pulmonary tubercle, as if the disease was of a genuine inflammatory nature.

"Even when we are obliged to resort to sanguineous depletion, in consequence of the complication of inflammation or of hæmorrhage, we should be content with obtaining a few ounces from the upper part of the chest by means of leeches or of the cupping-glasses. Minute doses of the tartrate of antimony, combined either with the syrup of poppies or with the extract of hemlock or of henbane, should at the same time be administered for a few days, until the febrile symptoms abate and the cough becomes looser or easier.

"*Counter-irritants.*—Much relief may often be derived from the use of these means—from blisters when the symptoms are rather acute, and from the antimonial ointment in more chronic cases. The irritant recommended by Dr. *Stokes*, which is composed of acetic acid and essence of turpentine, is a most useful one, and may be often most advantageously substituted for those in more common use: it seems indeed to have some other effect than that merely of a counter-irritant.

"*Iodine.*—Decided benefit has been obtained in not a few cases of tuberculous disease of the lungs, as well as in various other allied forms of scrofula, from the use of this potent remedy and of its preparations. Minute doses of the iodine itself, in combination with the hydriodate of potash, may be given in distilled water, or in the infusion of Calumba, to which some syrup of poppies should be added. The medicine should be continued for a length of time, as its action is slow and progressive.

"*Tonics* are necessary in almost every case of phthisis, where the dis-

ease is not acute or febrile. Steel, quinine, nourishing diet, country air, &c., are the best that can be used.

It is unnecessary to say that the exhibition of this and of every other class of medicines in phthisis requires great tact and practical experience. No one but an empiric can talk of any remedy being a cure for consumption. The following judicious remarks show that the author is a man of judgment: there is nothing novel in them, but there is, what is much better, good sound practical sense.

"When a person who may have a hereditary predisposition to tuberculous disease, is suffering from a troublesome cough, accompanied with expectoration, dyspnœa and feverish restlessness, the first thing that we should do is to order the application of a few leeches immediately above or below the clavicles, and small doses of the tartrate of antimony with henbane or hemlock in frequently repeated doses; a saline purgative may also be necessary. If the symptoms do not abate, we must again have recourse to the leeching, or to a small blister. When the symptoms of bronchitis have ceased, as usually happens in the course of a few days, but yet a hard dry cough remains, and the inspiratory murmur be rough and noisy, or that of expiration be louder and more prolonged than in health, the use of an emetic every second morning before breakfast, will be found to be of the greatest service: the preparations of iodine internally, and the turpentine and acetic acid liniment may also be used with advantage, at the same time. After this treatment has been continued for some weeks, the patient will usually be found to be much relieved of all his constitutional distress; and perhaps a pallor of the countenance, and a quickened state of the pulse, are the chief, if not the only, symptoms that are present. Now is the proper time for the exhibition of tonics, and the use of a nutritious diet: residence in the country at the same time should be had recourse to, if possible. Under such a course of treatment, the patient will often regain his strength and flesh, and perhaps all the auscultatory signs of pulmonary tubercles will cease, except a certain hardness or roughness of the respiratory sounds.

"Even in the hæmorrhagic form of phthisis, the use of occasional emetics has been attended with decided benefit, when the bleeding has ceased: the efforts of vomiting do not seem to have any tendency to reproduce the hæmorrhage."—*Gazette Medicale.*

Nitrate of Silver in Erysipelas.—M. Velpeau has not much faith in this remedy, although several American and English writers have expressed themselves decidedly in its favor. He says:—

"These gentlemen seem to me to have acted very confusedly; for it is almost impossible to determine in what form of cutaneous inflammation the remedy has been found chiefly useful. I have used it in upwards of thirty cases; in some, applying the caustic to the affected surface directly, in others around its circumference; occasionally the remedy has seemed to be useful, but more frequently it has utterly failed. Sometimes, indeed, it has appeared to arrest the progress of the inflammation; but in most cases this was merely temporary, and the zone of the cicatrization did not ultimately prevent its extension. I have given

a fair trial to the remedy, by applying it to one limb that was affected with erysipelas, and treating another limb of the same patient in another manner; and I have found that the former was often the more tardy of cure. On the whole, therefore, I regard the nitrate of siver, 'comme un moyen inutile et à laisser de coté.'"

Nor is he more in favor of the liquid acid nitrate of mercury, blisters, mercurial ointment, spirituous and camphorated lotions, and irrigation from a continued stream of cold water. This last remedy was much used by M. Cloquet, at the Hospital of the Faculty, when the Editor was in Paris in 1834–35, and from all that he saw he came to the conclusion that it was much more effectual than any form of treatment that was pursued in the other hospitals. Indeed, he was inclined to think it exerted a peculiar and powerful curative influence over Erysipelas. But, alas! *experientia felax.* This was all a delusion, for irrigation with cold water is now pronounced by M. Velpeau, not only inefficacious, but decidedly injurious.

After considering all the topical modes of treatment, M. Velpeau arrives at last to make the wonderful disclosure, that a solution of the sulphate of iron has a specific effect on erysipelatous inflammation. *Nous verrons.*

We happen to know M. Velpeau, and we hesitate not to say the following remarks of his are quite as applicable to himself as to any medical man with whom we are acquainted in Paris, or indeed any where else.

Ignorant Abuse of Remedies.—"Medical men, falling into the deplorable confusion which we have so often pointed out, have applied the remedy right or wrong, by hook or by crook, (à tort et à travers,) sometimes for one case, sometimes for another, and meeting either with success or failure as chance might happen, and of which they could give no rational account, they have, as might be expected, come to the most opposite conclusions."

Poisoning by Oxatic Acid.—Mr. Temple records the case of a girl, who disappointed in love, took half an ounce of exotic acid, dissolved in water. In about an hour afterwards, he administered lime water and carbonate of magnesia, mixed together, which she swallowed with difficulty, owing to the burning pain in the mouth and fauces. She recovered.

"In connexion with the above case," Mr. Temple remarks, "I would wish to allude to an erroneus mode of treatment of poisoning by oxatic acid, recommended by the older writers, on toxial-

ogy, and still, it is to be feared, adopted by many practictioners in the present day. In "Male's Forensic Medicine," it is stated, when treating of the antidotes of this poison, "The remedy is *plentiful dilution* with milk, gruel, or water." Now it has been pointed out by subsequent obserevers, that from the great solubility of oxatic acid, a plentiful dilution only facilitates its absorption into the system, and thus hastens its dangerous and fatal effects. The stomach pump appears to be of no service in this kind of poisoning; and the best plan of treatment seems to be, at once to administer the antidote, either magnesia or lime in a *small quantity* of liquid.—*Lancet.*

Opiate injections in Puerperal Convulsions are recommended by Dr. Madock. He has seen them attended by the happiest results when all other remedial means had failed.—*Ibid*

Kreosote in Hæmatemesis.—Dr. Gravenor has had three severe cases of hæmatemesis in which Kreosote combined with the acetate of lead proved successful. The former was given in half drop doses in mucilage every half hour, and the latter in grain doses every hour.—*Ibid.*

Warm Water in Colica Pictonum.—Enemata, of warm water, administered while the patient is in the hot bath, appears to have been very successful in the treatment of Colica Pictonum, according to the testimony of Dr. Williams. The effect of this combination, it is said, has been very successful, both in regard to the symptoms of pain and constipation, and to the paralysis, where that existed.—*Ibid.*

Tooth-ache.—It is worthy of being more generally known that the following formula will always remove the tooth-ache in a few minutes, say ten or fifteen, if the bowels are not unhealthily confined. The dose of the opiate should be proportioned, as well as may be, to the violence of the pain; for it will produce no constitutional effect whatever, while it has a violent tooth-ache to grapple with:—

Carbonate of Ammonia, gr. x;
Sedatine solution of Opium, M. xv;
Ipecacuan wine, M. xv;
Colchicum wine, M. x;
Camphor Mixture, x drachms M.—*Ibid.*

Case of Atresia Vaginæ in a single Woman.—This case occurred in an individual 18 years of age, and was marked by symptoms resembling those of dysmenorræa. At every successive recurrence of the menstrual period, her sufferings increased more and more, until at last, they were as great as those often experienced in parturition. Upon examination of the vagina it was found closed by a membrane, the result, as is supposed, of inflammation. The intense pains and spasms experienced by the patient were ascribed to the accumulation of the menstrual fluid in successive menstruations. The membrane was divided, and immediately there followed the division, "a strong jet of grumous blood, which flew two or three feet from the orifice." This continued until as much as five or six pounds were discharged. The operation was followed by immediate relief, and in due time, by a perfect restoration of health.—*Medical Examiner.*

The Medical Examiner.—We have before us the 1st, 2d, and 3d, Nos. of a new series of this interesting periodical, "with considerable modification of form, price, and editorial arrangements." While Drs. Biddle and Gerhard, still continue to be co-editors, Dr. Reynell Coates has become the acting editor. This arrangement, considering the talents and attainments of the latter gentleman, cannot fail to be exceedingly acceptable to the numerous readers of the Medical Examiner. "It is," we are assured, "and will ever continue to be, free from local or party bias."

Operation for Wry-Neck.—The following case of wry-neck. is taken from a paper by J. Nottingham, Esq., late House Surgeon to the Liverpool Infirmary:

"Mary Sesnan, aged twelve years, has had wry-neck since she was twelve months old, for which the mother cannot assign any cause; the distortion is considerable, and she complains of inability to move the head with freedom.

"The sterno-mastoid of the right side is in a state of permanent contraction; the right ear pulled down towards the corresponding shoulder; the chin twisted to the opoosite side; the distance between the meatus of the ear and the top of the sternum is much less on the right side than on the other. It is the true sterno-mastoid, not the clavicular portion of the muscle, that is contracted.

"A sharp-pointed, narrow bistoury was passed under the affected muscle from within outwards, a little below the crossing of the omohyoideus tendon, its edge then directed towards the skin, and the sternal portion

of the muscle divided. Its section was accompanied by a sensation communicated to the finger more or less like that the surgeon perceives when the tendon Achillis is cut across.

"We immediately observed a difference in the position of the head, and on the affected side it was obvious that the distance between the top of the sternum and the meatus of the ear was about an inch and a half greater than before; but it was thought that further improvement might probably be effected by another division of the muscle near its attachment to the mastoid process, which was made by gliding the bistoury under the integument and cutting down upon the bone. The effect of this section was not so great as that produced by the first.

"A little adhesive plaster was applied over the punctures, and two or three turns of a roller round the neck.

"It is now five weeks since the muscle was divided; the head can be turned to either side with facility, and the distortion is much diminished; the cervical vertebræ, however, long accustomed to peculiar position, do not at once retain the improved direction, which, by a little artificial support, can be given to them. The patient expresses herself with satisfaction respecting the "easy" manner in which she can now move and hold her neck.

"Since the report of the division of the sterno-mastoid was written, improvemnt has gradually taken place in the neck of the patient; and we have every reason to be satisfied with the results of the operation."

London Lancet, Nov. 6, 1841.

"In this case we can see no propriety in the division of both extremities of the muscle. Thus far, the case was one of hyper-operation. Both heads should have been divided below, and at once, or the superior attachment should have been alone involved."—*Med. Examiner.*

Angular Union of fractured Bone, remedied by Sawing off the Callus. Professor Portal reports two cases in which this operation, the merit of which is due to our distinguished countryman, Dr. J. Rhea Barton, of Philadelphia, was practised with success. One was a compound fracture of the bones of the leg, Prof. P. cut down upon the callus, divided the bone with a chain saw, excising about an inch of the bone—the two ends united by the first intention, and the patient was perfectly cured, the limb being only so far shortened, as to make it necessary that he should wear a thick soled boot. The other case was a fracture of the thigh, operation the same, suppuration and granulation took place, but the wound finally healed with very little deformity.—*Gaz. Medicale.*

Invention of the Operation for Strabismus.—We perceive that at a late meeting of the Academy of Medicine, of Paris, M. Velpeau read an extract from a scientific work published in 1743, which gave an account of a mode of "straightening squinting eyes," practised by a Dr. T., at Rouen. His plan was, with a needleful of silk, to take up a portion of the conjunctiva of the squinting eye towards the lower part of the globe; and having made a loup of the silk, he pulled up the portion

of conjunctiva confined in it, and cut it off with scissors. He then put a plaster over the healthy eye, and the one that squinted became straight. M. Velpeau asked if this fact might not secure to France the honor of the discovery of the operation for Strabismus.

Embalming the Dead.—Drs. E. and A. Parsons, at No. 3, Winter street place, have sent a circular to the medical profession in Boston, saying they "have established themselves in this city, with the intent to practise the art of embalming or preserving, for a longer or shorter period, the bodies of those deceased whose relics their friends may wish kept from decay." This is a new thing under the sun, in this section of the world. We think, however, that these gentlemen are well qualified to accomplish what they promise. In France, the act of embalming distinguished persons is customary. The bodies of many celebrated individuals known to us on the page of history, although many years dead, appear as though they were only in a quiet slumber. The natural tendency to decomposition is seasonably arrested—and it is not at all improbable that their bodies may be preserved for centuries to come.—*Bost. Med. & Surg. Journal.*

Dog Phrenology.

"A M. Leonard, a French gentleman, now in London, has been for some time amusing himself in training dogs; he believes, that, by usage, and steady perseverance in inducing the animal to repeat again and again, what was required, not only would the dog be capable of performing that specific act, but the part of the brain which was brought into action by the mental effort would become more largely developed, and hence a permanent increase of mental power be obtained. This reasoning is certainly in accordance with the laws of phrenology. Now for the result: a writer in the Lancet, states that M. Leonard, after making his dogs (of Spanish breed) perform a variety of tricks, and obey a great number of orders, finally invited the younger to play a game of dominos; the animal took his seat at the table, the dominos were placed before him, and the correspondent of the Lancet, took his seat opposite; the dog having a double, played it, his adversary followed, then the dog, and so on, till the game was finished; during the second game, the gentleman played false, intentionally. *The dog looked surprised, stared very earnestly at the player, at length growled, and finally barked angrily!* Finding that no notice was taken of his remonstrances, he pushed away the wrong domino, took a suitable one from his own pieces and placed it correctly; the writer then continued the game, which the dog won. Not the slightest intimation was given by M. Leonard, to the dog during the game; his play was assuredly the result of his own judgment. We commend this case to the notice of the admirers of the canine race; particularly to that of our friend the editor of the N. Y. Amer., upon whose judgment in the case, we pin our faith—if he believes the story, we will—if not, not. N. B. We should like to believe it.—*N. York Med. Gaz.*

Baltimare Animal Magnetism Report.—Although the newspapers of that city had circulated, extensively, the result of the animal-magnetism exhibited in Baltimore, a regular report, under the signatures of Drs. C. A. Harris, T. E. Bond, Jr., &c., has subsequently appeared, in which the details are as circumstantial as could be desired. The concluding words of the report read thus—"In conclusion, it is our deliberate opinion, that the whole exhibition by Dr. Collyer, was a miserable trick, and on insult to the good sense of this people."

Quackery and Humbug—The Medical Society of London held its first meeting for the session on the evening of September 27, 1841; Dr. Clutterbuck, president, in the chair. There was a very full attendance of members and visitors. In some preliminary observatious, Dr. Clutterbuck took occasion to allude to several kinds of "quackery" and "humbug" which have lately prevailed to a certain extent in the profession. He particularly alluded to some new operations for defective vision, to operations for stammering, and to mesmerism. He classed the three together as being equally worthy of condemnation. He could not help expressing regret and surprise, that such proceedings as those should obtain even a transient notoriety in a profession so strictly one of fact as that of medicine. When, however, they did, unhappily for the public and the profession, succeed in obtaining dupes, then it was the duty of societies, like the Medical Society of London, to expose and condemn the fallacies. This was an great benefit which medical societies conferred upon the public.

WESTERN & SOUTHERN MEDICAL RECORDER.

The following notices of this periodical, have appeared in Journals devoted to the advancement of Medical Science.

From the Boston Medical and Surgical Journal.

No 1, of a new monthly medical journal, bearing the title of "Western and Southern Medical Recorder," has appeared at Lexington, Kentucky, under the editorial charge of James C. Cross, M. D., one of the Faculty in the Transylvania University. He was formerly in the Chair of Materia Medica and Therapeutics, at the Medical College of Ohio. Of Dr. Cross's ability to conduct the publication, now fairly commenced, there can be no doubt. If the profession at the South and West, for whom he expressly exerts himself, will give that cheerful patronage which the character and importance of the Journal have a right to expect, it will soon become the medium of valuable information, and

be looked for with solicitude every month. The leading articles are fine specimens of writing—emanating from sources, too, which will always command the respectful attention of an elevated class of readers. The best service we can do this new candidate for fame, is to republish, from time to time, some of its excellent papers.

From the American Medical Library and Intelligencer.

"*Western and Southern Medical Recorder.*—This is the title of a new candidate for professional favor on the western side of the Alleghanies. The school of Louisville has already a journal in connection with it; and the one before us is destined, we presume, to be, in some respects, the organ of the medical school of Transylvania University. Professor Cross is well calculated to be its editor. He is well read in professional lore; and is full of zeal and activity in the cause of science.

"We cordially wish his periodical every success. It is a new laborer in the field of science, and cannot fail to bring forth useful fruit."

From the Medical Examiner (Philadelphia).

"The number (for the present month) of the Western and Southern Medical Recorder lies upon our table. It is an octavo of forty-eight pages, designed to appear on the first Monday of each month.

"We welcome it as a medium of communication with the School of Transylvania, and the science of the highly cultivated city of Lexington."

From the New York Medical Gazette.

"We welcome into existence a new contempary—the "Western and Southern Medical Recorder."—edited by James C. Cross, M.D., Professor of the Institutes of Medicine, &c., in the Transylvania University; it contains 48 pages each number, and is to be published monthly. The Doctor is determined to prove his strength and independence of collateral assistance in the outset, as nearly thirty pages of the first number are by himself, in the form of original matter and critiques."

From the Select Medical Library and the Bulletin of Medical Science.

"This new Journal, the title and editorship of which are announced above, will be published monthly, at four dollars a year. Each number to contain 48 pages. The editorial article of the number before us, is a *Lecture on Systems of Medicine*, which, whilst it evinces thought on the part of the writer, Dr. Cross himself, invites to inquiry on the part of the reader. To the profession every new Journal is a means of enlisting talent in a course of exhibition, which would not otherwise have been made; and hence, we hail with pleasure, the appearance of the *Western and Southern Medical Recorder*, in the pages of which "Pathology and Therapeutics" will be the topics discussed."

We publish these notices of the WESTERN AND SOUTHERN MEDICAL RECORDER for the two-fold purpose of thanking the conductors of the journals just quoted, for the favorable manner in which they have been pleased to speak of it, and to correct an error into which some of them appear to have fallen. *The American Medical Library and Intelligencer*, looks upon it as "the organ of the Medical School of Transylvania," and the Medical Examiner welcomes "it as a medium of communication with the School of Transylvania." It is true that the editor of the Western and Southern Medical Recorder is a professor in Transylvania Uuniversity, but it would be doing the school in which he teaches, injustice to regard so humble an instrument as its organ, or to hold it in any way responsible for the matter it may contain, or the manner in which it may be conducted. It is an individual enterprise, the Editor having found it necessary to assume the whole pecuniary responsibility, and its pages thus far illustrate the truth of what was said of the first number by the editor of the New York Medical Gazette. This however, has been from necessity, and not from choice, as the editor would be pleased to receive collateral aid from any quarter, and this, he is promised from several sources, that cannot fail to add greatly to the interest of its pages. Thus far, he has had no reason to complain of the Western and Southern medical public, for already it has extended to it such *substantial* aid that it is able to stand alone.

Medical Memoranda.—It is stated in the *Boston Med. & Surg. Journal*, that a strong decoction or infusion of the Comptonia Asplenifolia, or sweet fern, has been in one case successful in expelling from the bowels a tape-worm 42 feet in length. The patient used it freely—drinking large quantities for several days, then stopping its use for a short time, and taking a brisk cathartic in the interval.——M. Rocher, of Paris, opened a patient that died of glanders, and held in his hands some of the parts, examining them at leisure. The following night he sickened and died, the 16th day, of glanders, as was proved by the fact that a horse inoculated with some of the matter taken from his body, died of the disease. M. Rocher, so far as it could be ascertained, had no scratch or wound about his hands, by which he could have been inoculated, and is supposed to have taken the disease by imbibition, or by miasmatic infection.——Malignant scarlet and typhus fevers are prevalent in London and the country about, proving sometimes fatal in an incredible short time. Some persons have died in a few hours after the attack. This was the case in many instances of the scarlet fever that prevailed in this vicinity last autumn.——It appears, according to Dr. Edwin Lee, that *Homœpathy* is dead in its native land. It is now little heard of

in Germany or France, and was never in those countries sanctioned by any man of eminence in the profession.——In the Artisian Well at Paris, the boring extends 1800 feet. The torrent of water 3 cubic yards per minute, rises in a copious fountain, and is very pure. The column rises from a source one-third of a mile below the ground, and spouts thirty feet above the surface. Temperature at the bottom 83° Fahrenheit. By allowing the usual average of 1° per 50ft. descent, we should have a boiling fountain at a depth of two miles—ignition of rocks at 10 miles—and fusion at 200 miles—thus giving the citizens of Paris a good thick crust between them and the earth's internal fires.—*Silliman's Journal.*—Do these Geological speculations about "the earth's internal fires," lend any support to the notions of Bishop Horsley, who, if we remember correctly, suggests the probability that the infernal regions are somewhere in the centre of the earth. If so, cannot some of the moral peculiarities by which the Metropolis of France is distinguished, be charged to this proximity of "the internal fires"—we say proximity, for really to our excited fancy, when you speak of being within 200 miles, only, of the Dark Domain of the Father of Lies, the propinquity seems to be fearful. We commend this subject to the notice of the Geologists, especially to those who deny the truth of the Bible; to them it should have a personal interest.—*N. Y. Med. Gaz.*——Nine persons of a family in Oldtown, Md., were taken violently sick after eating of Hominy boiled in a copper vessel, it which it remained all night, but were relieved by the early application of remedies. A cat which had eaten of it was also affected in a similar manner. Families cannot be too cautious in the use of copper vessels, as accidents are frequent from the same cause.——Professor Kirchoff the Russian chemist, who first discovered a method of converting starch into sugar, has hit upon a way of preserving milk for an indefinite period. It is to be evaporated by a gentle heat to a dry powder, and preserved in well stopped bottles—when wanted for use, mixed with water, is as good as fresh milk.—*Ibid.*——In London there are eighty acres of burying grounds, which are in such a disgusting state at the present period, as to have elicited the notice of the public press They have been used for hundreds of years, and are of course crowded with bones and the accumulations of centauries.——The medical attendants in waiting at the palace, at the birth of the prince, were Drs. Clark and Ferguson, to be consulted in case of necessity. Dr. Locock, the royal accoucheur, is the Luckiest man in England, and therefore quite an object of envy to the less fortunate professionals. His fee, on this occasion, will be immensely superior to the one received on the birth of a princess.—*Bost. Med. and Surg. Journal.*——Mr. Curtis has used tincture of aconite exter-

nally, in cases of neuralgia, with considerable success; the manner of using it is to rub the part with a small bit of sponge saturated with the tincture, and fixed on the end of a stick; continue the rubbing till the quantity you desire to use average one drachm, is rubbed in; if the fingers of the assistant are wetted, an unpleasant numbness results The first effect of this application is cooling from the evaporation; then redness, tingling pain, and swelling, afterwards a numbness. These all pass away in two or three hours, and very frequently leave the patient quite relieved from the nuralgia or rheumatismal pain.—*Lancet.*——A carriage spring has been invented, by means of which passengers can read and write while travelling. A metallic cylinder is filled with air equal to thirteen atmospheres, by means of an air pump--oil placed over this, and an air tight piston fitted to the cylinder on which the carriage rests. Mr. Ellsworth of the patent office, has ridden in a carriage so constructed, and finds it to answer the expectation.——The Influenza was prevailing at Buenos Ayres, at the last accounts, to an alarming extent, many cases proving fatal.———Johnson's celebrated patent Syrup, as recorded in the London Patent of Office, a is compound of Syr. Liquorice Root, *one ounce*—fresh juice asparagus root and syrup of mallow, each 46 grs.———On the third of September, at 2 o'clock in the morning, Mons. C., of New Orleans, but then in Paris, was awakened by a rustling of the bed clothes, and presently a cold hand was laid on his face, and what appeared to him the voice of his son, exclaimed, "Father! I am dying!" So strong was the impression, that he arose and noted the time and expression. On his return to New Orleans, he ascertained that his son had actually expired at that precise moment, and his last words were "*Father! I am dying!*" We take this from a N. Orleans paper, where it is vouched for by a respectable merchant. Cannot our friends of the Philadelphia Examiner make a case of clairvoyance of this? We ask the question in all good faith, and "with all due respect."—*N. Y. Med. Gaz.*

Necrology.—It has been announced in the papers that *Luke Howe, M. D., President of the Medical Society of New Hampshire,* is no more. Of that individual the able editor of the Boston Medical and Surgical Journal, thus speaks:—

"As a writer, Dr. H. was eminently practical; and as a surgeon and medical counsellor, he had few equals. Many articles from his experienced pen are interspersed through the volumes of this Journal, and evince the soundness of his views, his judgment, skill, and Christian benevolence of character. In the death of Dr. Howe, New Hampshire has lost a citizen who was an honor to the State, and the medical profession a member who was a pillar in the temple of American Science."

THE

WESTERN AND SOUTHERN MEDICAL RECORDER.

EDITED BY JAMES CONQUEST CROSS, M. D.

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No. 5. LEXINGTON, KY. MARCH, 1842. Vol. 1.

NOTE ON THE SEDATIVE ACTION OF CALOMEL.

BY THE EDITOR.

We have, for more than twelve years, practised upon the principle, that the effects of a large dose of calomel are different from those that result from a small one. By a large dose we mean twenty, and by a small one, five grains. Although we urge no right to the original suggestion, here alluded to, as we frequently meet with practitioners, who are ignorant of the fact, or are unwilling to acknowledge its importance, we shall not be tresspassing upon the indulgence of our readers by pressing its claims with such facts as we have observed, and such arguments as may occur to us.

We rarely ever use calomel as a purgative. It is slow and uncertain in its action, and, therefore, much more inefficient, than many other articles, to be found in the class of cathartics. When the secretions of the chylopoetic organs are deranged, we always give it for their rectification, either alone, or with some purgative for the purpose of increasing its activity. With disorder of the organs referred to, there is commonly associated an irritable condition of the alimentary tube, and when this is the case, we have uniformly found that a scruple, or half-a-drachm of calomel, is much more effectual in moderating inordinate activity of the in-

testinal tube–in arresting the copious serous secretions of the bowels, almost always present, under such circumstances, and in provoking the liver to action, which is generally at fault, than any smaller quantity. Twenty grains will commonly bring down two or three consistent and bilious evacuations, while five or ten, will usually increase the periestaltic action of the bowels, and will cause the evacuations, by irritating the stomach and bowels, and thus augmenting the serous and mucus secretions, to be frequent, liquid and exhausting. It is in cases of irritable bowels, in which frequent watery stools are passed, that calomel, either alone or in combination, is always given, and it is, therefore, of the utmost importance to know what quantity is calculated to do most good. On this point my mind has long been made up, and I am satisfied that my success in treating intestinal complaints, has been mainly owing to the fact, that I have kept constantly in view, the marked difference in the effects that result from large and small doses of calomel. Indeed, so thoroughly am I convinced, that the efficacy of this mineral mainly depends upon this circumstance, that I am not surprised at the very contradictory effects it has produced in the hands of those who rely upon five and ten grain doses. That they should have but little confidence in it, is not wonderful, for they give it, as we believe, in quantities that are calculated to do more harm than good.

It is not our design to enter into any theoretical explanation of the cause of the difference under consideration. It is an incontestible therapeutical fact, of great importance, and that circumstance is enough to answer the purposes of this Journal, which are to promote practical, and to discourage hypothetical medicine. Nor does the mode of action of calomel, which we desire to illustrate, rest upon our authority. It has been repeatedly observed and verified in actual practice, by those who have enjoyed the most favorable opportunities for arriving at truthful results. Thus, Mr. Annesley, who practised many years in India, says, that "Calomel combines with and renders fluid and detaches the viscid mucus secretions attached to the alimentary canal; it diminishes the vascular state of the stomach when this is in excess, and increases the cipillary circulation in the mucus coat of the large intestines. Thence it is useful in large doses, in increased vascular action of the intestinal canal, indicated by the state of the tongue and the irritability of the stomach, such as occurs in fever, hepa-

titis, dysentery and peritoneal inflammation after a full bleeding." In another place, the same writer remarks: "It is generally believed, and probably it may be true, that many constitutions in India are ruined by the use of calomel; but I am disposed to consider this to be the consequence of continuing it in small quantities, long after the necessity for using it ceases. Small doses of calomel, from two, three, to four, &c., grains, will purge and keep up a considerable degree of irritation in the stomach and bowels, when twenty grains will not; but on the contrary, will allay the irritation of both, when it results from inflammation of their mucus surfaces." On the same subject, Dr. Johnson says: "I shall prove in the course of this Essay, what, indeed, is well known, to many of my brother officers who have served in India, that twenty grains of calomel will act as a sedative, and so far from griping and producing hypercatharsis, it will soothe uneasiness, and rather constipate than purge." Again he says:—"I have myself taken calomel in twenty grain doses, three times a day, without experiencing the slightest inconvenience from the quantity; nay I often found large doses sit easier on the stomach and occasion less irritation in the bowels than small ones." By Dr. Merrill, of Natchez, it is said:—"Calomel, when given alone, I have always found to produce the best effects in scruple doses. A smaller quantity than this operates more frequently, producing greater irritation of the stomach and bowels, and causing frequent watery dejections, which rapidly debilitate the patient." Again he says: "The medium dose of twenty days rarely fails to quiet the irritability of the stomach and bowels, and carry off large quantities of feculent bilious matter, without griping, tenesmus, prostration, or any other untoward symptom." Dr. Cartwright, in his Essay on Syphilis remarks that "those who have not used calomel extensively, would be apt to suppose *a priori*, that large doses would produce hypercatharsis, and debilitate the patient. But experience can best refute such suppositions, for it shows us that large doses of calomel operate much more mildly than small ones." The late Dr. Armstrong says:—"Small doses of calomel from two, to four and six grains, will purge and keep up a considerable degree of irritation in the stomach and bowels, when twenty grains will not; but, on the contrary, will allay the irritation of both, when it results from inflammation of their mucus surfaces." Dr.

Thompson in his work on *Materia Medica and Therapeutics*, informs us that it "often happens that small doses of calomel cannot be retained on the stomach when this viscus is in an irritable state; although it retains large doses which act as a sedative.—My own experience has afforded me numerous illustrations of this remark." Dr. Lewis in a very recent article on "*Tropical Dysentery*," speaks in terms of great praise of the treatment followed by Dr. Heyn at Java, in that disease, which consisted in administering, at the very outset of it, a scruple of the chloride of mercury. According to his experience, this powerful pharmaceutical agent, when employed in small doses, acts as an irritant, but when given in large quantities, has so decided and immediate an effect, as to merit the name of a direct sedative.—I have seen soldiers brought into hospital in the most severe agony, discharging mucus and blood at very short intervals, and laboring under the most aggravated form of the disease. On administering a scruple dose of calomel, the most marked and gratifying amelioration took place. The tormina, tenesmus, and diarrhœa almost instantly cease, a feeling of comfort takes the place of the most intense suffering, the countenance brightens up, the pulse, heat of tongue and thirst, when present, are diminished, and in short, all the distressing symptoms are much alleviated.

The concurrent testimony of so many respectable physicians, who have deduced their opinions from actual observation, cannot fail to satisfy all that the effects of a large dose of calomel are very different from those of a small one, and that while the former allays the irritability of the bowels, the latter rather augments it, than otherwise. It would be easy to adduce, from personal experience, facts, in confirmation of the above allegation, but that would be merely to extend this article without increasing its value. It may, however, be useful to contrast the results of large and small doses of calomel, as they have been displayed in the same cases: we shall therefore adduce a few illustrative examples. In 1827, we were called to a young lady who appeared to be laboring under dysenteric symptoms—the bowels were irritable and the stools consisted mainly of mucus and blood. On inquiry, we ascertained that she had been treating herself, for some weeks, for, as she supposed, dyspepsia, with very small doses of calomel, according to Dr.

Ayres' plan. This, I was satisfied, brought on the dysenteric state of the bowels under which she was suffering, when I first saw her, for it did not occur at the season when dysentery prevails, nor were there any other cases of that disease in her immediate family, or in the neighborhood. Not deterred by the conviction that her disease was the result of small doses of calomel, I gave her twenty grains of that mineral—repeated the same dose in twenty-four hours, and an ounce of castor oil in twelve hours after the last dose, and her disease was subdued.

In 1829, a lady, in the first months of pregnancy was afflicted with excessive vomiting, so much so, indeed, that her friends and physicians became apprehensive that she could not live. After every other expedient had been used, small doses of calomel amongst the rest, she took a drachm of calomel, at a single dose, and the irritability of the stomach was at once calmed, and it did not return again to such an extent as to cause uneasiness.

In 1832, my own son, five years of age, was afflicted with dysentery and was treated for ten days with small doses of calomel, ipecac. and opium. Instead of improving, he daily grew worse and worse. The tormina and tenesmus were intensely severe and I became much alarmed for his situation. Almost in despair, I gave him a scruple of calomel, and to my surprise and gratification, he was in two hours suffering much less, and in a short time went to sleep, in which state he continued four or five hours.—When he awoke he was comparatively easy—the pulse was fuller and slower, and the skin inclined to be moist. The tormina and tenesmus were now trifling, in comparison to what they had been, and but two discharges, which like those that had passed previously to taking the scruple of calomel, were of blood and mucus, in the space of ten hours. Twelve hours after the first scruple had been taken a second was given, which, in about ten hours, was followed by a copious bilious stool. A dose of castor oil completed the cure.

In 1835, I was called upon to visit a gentleman in Cincinnati, who was laboring under a diarrhœa, which was exhausting him very rapidly. I wrote a prescription and handed it to his lady, who, the moment she saw I had ordered a scruple of calomel, exclaimed that so large a dose would certainly kill Mr. H., as five or six grains had several times nearly purged him to death. I

assured her that there was a wide difference between five and twenty grains in their effects on the bowels, and that there was no ground for her apprehensions. After much persuasion she suffered him to take it, and to her surprise, he had but two discharges from the bowels before the mineral brought down a bilious stool, when he was relieved.

In 1840, I was called to an interesting and intelligent young lady, who had been laboring under dysentery for nearly three weeks. Her physicians, two in number, had given her various remedies, and among others, repeated small doses of calomel, and so far from improving under them, she was considered in a hopeless state of exhaustion when I first saw her. The blood and mucus stools had ceased, but the alvine evacuations were still frequent, very liquid and wholly destitute of bile. With much reluctance, her physicians agreed that she should take a scruple of calomel. During the next twenty-four hours her bowels acted less frequently and the stools appeared to be slightly tinged with bile indicating some improvement in the secretory action of the liver. I then urged a repetition of the dose, but was not successful in convincing her physicians that it was necessary. I then predicted that she would not, in twenty-four hours, be in any better state than when I first visited her, and this proving true, one of her physicians consented to let her take another scruple, while the other withdrew from the case, refusing to take any part of the responsibility. A scruple of calomel, was now given for three or four nights in succession, under which the state of her bowels rapidly improved, and she was in a few days declared out of all danger.

Such facts speak for themselves—they require no interpreter—they conclusively establish the important truth, that small doses of calomel show a decided tendency to increase intestinal irritation, while large ones, not only allay it, but produce a general tranquillity and comfort throughout the body, in states involving great suffering, which we have no right, from our knowledge of the action of medicines, to expect from any other article.

WESTERN PRACTICE AND MIASMATIC FEVERS.

BY DR. JOHN H. BLUE, OF CHARITON, MO.

In a paper published in the forty second number of the Transylvania Journal of Medicine, the writer took occasion to say, that "the opportune use of the lancet and the judicious employment of calomel were particularly requisite in the treatment of the diseases" of this country. These herculean means will have their proper place assigned them in the treatment of miasmatic fevers, in the course of the present paper.

It is not the design of the present article to enter into a labored investigation of the pathology and the etiology of Miasmata. Observation and experience incline me to the opinion that they induce, in the human system, a state of irritation and debility, *ab initio*; there is a diminution of vital power; and the febrile exacerbations in some cases only tend to further derangement and prostration. In mild cases the *stimulus*—if it may so be called—of the fever, the reaction of nature increases their vital power, expells the morbific agent by the skin, the liver, the kidneys and the other secreting organs; and the system is again able to resume, by degrees, its accustomed functions without the assistance of medicine.

Miasmatic fevers always commence with lassitude, depression, and diminution of strength. Sometimes the onset of the disease is so overwhelming that the system sinks under it with little or no apparent resistance, as from a fatal dose of some narcotic poison. Such are some of the worst cases of the Cold Plague, Congestive Fever and Typhoid Pneumonia.

But generally the periods of invasion and chill are followed by a reaction of the system—a salutary effort of nature to throw off the miasmatic poison, and to establish the healthy action of the sysem. Now here is the great use of medicine—not to act in an undefined and mysterious manner; not to act with more sagacity in the prescription than in hunting out and destroying the disease; but to regulate, and to sustain the sanative powers of nature. That individual who unsheathes the lancet, or doses with calomel, or resorts to any other favorite routine of practice, because he does not know what else to do, is a dangerous individual. It matters not

whether quackery consists in the burning compound of the steam doctor, the infinitessimal and invisible doses of Halmemann, or the full pharmaceutic recipes of medical theorists, quackery is quackery still. Such practice goes forth into the world like an unseen epidemic—the remedies take hold on death, and the prescriptions are only assignments to the grave!

I would not wish to detail a feeble and inefficient practice—I should wish to present the dictates of my own judgment, and the character of Western practice. But there is always great danger of passing into extremes, and I would always rather be guilty of the sin of omission, than the sin of commission—rather rely on the *vis medicartrix naturæ* alone, than on the hap-hazzard interposition of art. We should never do any thing in the dark—if we see nothing to do, we should do nothing. We may make use of any expedient—moral medicine, I think Dr. Caldwell calls it—to amuse the patient; the Faith Doctor's mummery, or a little colored water; any thing to gain time till we know what to do. In the ordinary business of life, they say, you should never put off till to-morrow what you can do to-day. But in medicine this is routine practice. And you should never do to-day what you can do just as well to-morrow; you gain time—you gain observation, and by to-morrow, nature may have done all you wished to do, and in a much more safe and genteel manner. By this I do not mean to recommend the expectant plan of the eastern continent; but after all, it is much more safe than a rash and unskillful employment of the "kill or cure" means of the profession.

I shall not venture a dissertation on the *modus operandi* of venesection in the treatment of fever. It will answer my present purpose to say that we lessen the dangers of the inordinate excitement by lessening the momentum of the circulation, just as in uterine hæmorrhage of the active kind, we take away blood from the arm or foot to arrest the greater flow of blood from disease. We choose the less of two evils; we moderate the reaction of the system at once, instead of letting the system exhaust itself by the tumultuous efforts of nature to throw off the morbific agent. The secreting organs have become torpid—the secretions locked up, and the body not unlike a steam engine without a safety-valve. The weaker organs feel the full force of the disease—local congestions and inflammations ensue, and without the

timely interposition of medical means, this evil will have proceeded to an irremediable extremity.

Whenever the pulse is full and incompressible, the skin dry and hot, and the febrile exacerbations protracted and severe, nothing restores composure and healthy circulation, like a free abstraction of blood. It must not be weighed by ounces, nor measured by gills; but be governed by the indications of the pulse. One free bleeding is almost always enough—more may be dangerous.

The circulation being calmed, the torpor of the secreting functions should at once be attended to. Among the means, may be recommended, as symptoms call for them, pukes, purges, blisters and diaphoretics. But I particularly rely on calomel, or its equivalent, the calomel, aloes and rhubarb pill à à. I keep up this course, nothing preventing, till the secretions are unlocked, the hepatic in particular. But I do not continue the medicine "till there is no more bile in the discharges," as the expression is. We might as well talk of using diaphoretics, as long as the skin will sweat, or sialagoguas, as long as there is any saliva in the mouth! The expression is most ridiculous—the blunder, fatal! The liver may be goaded on till it elaborates the very life blood. Establish the secretion, as all other secretions—and this is a very important one;—but do not exhaust it. As to a salivation, for the credit and the pleasure of it, I would almost as soon lose my patient, as to salivate him severely—it is most cruel, pernicious, unnecessary. Salivation may accidentally happen—some persons cannot take the smallest dose, without a salvation. When I am aware of the idiosyncracy, I never give it; and when salivation is by any means induced in my practice, it is an accident, not a design—it ought to act upon the system, and not determine specifically to the salivary glands.

Having once moderated the febrile exacerbations, and unlocked the secretions, we must sustain the healthy action of the system, obviate the evils of functional derangement and general debility, and prevent a farther continuation of the fever. Formerly, it was the practice to protract the cases of fever, as taught in the eastern schools, by the whole routine of cooling powders, sudorifics calomel in broken doses, oils, salts, et cetera; carrying on the case to ptyalisim, and wearing out the disease and the patient

together—it was a doubtful chance between death and the doctor, which got the patient. As Burns said, on another occasion,

"I took the wa' that pleased mysel',
"And sae did Death"!

But instead of "running down" the system, I prepare it by the means heretofore indicated, and then institute a tonic plan, which generally succeeds in arresting the further progress of the fever, in saving the patient's strength, and in getting him up again in a short time. "The fear of debility has occasioned the death of thousands," says a great medical writer of this country, and I might add, with just as much propriety, the *fearlessness* of debility has been equally fatal. When a patient undergoes a long protracted sickness, runs through all the crises, and for a long period is at the mercy of the disease, the doctor and the nurse, a little accident—a little imprudence—a little neglect may suddenly carry him off. That physician is inexcusable, who does not attempt to arrest the disease at an early stage, and thus prevent the ills and the dangers of its continuance.

The febrifuge which I particularly rely on, is the Sulph. Quinine. This is not the place to discuss the question of its peculiar medical qualities. The convenience of its exhibition, and its peculiarly happy influence make me prefer it to all the other medicines—its use in large doses is now becoming quite prevalent in the West. Like some other articles of the Materia Medica—opium and Alcohol—in small doses, it is stimulant, and quickens the circulation, but in large doses it controls the pulse and overpowers the fever. The first experiments which I made, were on myself; often when feverish and exhausted, and when called on to make some fatiguing ride, I have found a large dose of Quinine to sustain me against a threatened indisposition; and the next day found myself as strong and vigorous as ever. But in prescribing for my patients, I seldom give it without combining it with other medicines, to govern its operation. Whenever the system is properly prepared for its exhibition, I watch the opportunity of a remission, and make use of something like the following prescription:

R. S. Quinine, grs. v to x.
Pulv. Camphor, grs. ii.
" Ipecach, gr. ss to i, and sometimes Opium; and repeat the dose every hour or two, till 3 or 4 are taken;

giving, as the stomach will bear it, cool slippery elm water or some diluent. If the pulse comes down in frequency, increases in fullness, and approaches more the healthy standard, I feel sure of my object—the patient will become more composed, the skin more natural, and even perspiration break out. I then give it two or three times more, at intervals, during the twenty-four hours; and when the time for the next remission comes around, give about three more powders, as on the day before, and so on, to keep the fever down. Should at any time, the fever rise much in spite of the prescription, it is certain that the system is not yet well prepared for it, or, that there is something peculiar in the case. I have to leave off then: and by cool sponging, diluents and perhaps another dose of calomel, prepare the system, and wait for another and more favorable remission.

The Quinine ought be to kept up several days. I recollect two cases, in which it was omitted at the end of three days, from the impression that the fever was entirely broken. But the fever again returned, and the whole work had to be done over. And I believe the fever would not have returned, had the Quinine been continued two or three days longer. Mild laxatives, oil or rhubarb, or enemata, must from time to time, be resorted to, to keep the bowels open. The liver will generally continue to throw off its dark and bilious secretions—perhaps naturally, when they are once established by calomel; but it has seemed to me, that the Quinine likewise acted as a cholagogue. Why not sometimes combine these two potential medicines together, in the same prescription?

Those who have never used large doses of Quinine, may fear to try them—so did I once—but I have never seen any bad consequence result from them. There may, indeed, be something in the tact of giving certain medicines which others cannot readily imitate; but there seems no difficulty in the present instance. The dose must be large, or none at all, to control the pulse, and the system must be properly prepared. But after all, I would not have it understood that the use of Quinine and its adjuvants, precludes the use of collateral means, or other obvious treatment. There are but few panaceas in the world—the recipe doctor is of all men, the most to be dreaded—there must be discretion used. But in the outline, which I have drawn of the treatment of miasmatic remittent fevers, I believe that judicious western men, who have tried the practice, will agree with me.

I treat intermittents on much the same plan—only the treatment need not be so vigorous, nor the Quinine given in such large doses: *stimulant* doses are generally the most successful, and a great saving of a costly medicine. I would recommend something like the following prescription:

R. S. Quinine. grs i, to ii.
Pulv. Camphor, grs ii.
" Opium, gr s ss to i,

every hour, for three or four hours before the chill is expected, and let the patient drink plentifully of strong hot coffee. This practice seldom fails to arrest the first paroxysm, and by a perseverance with the medicine, for a few days, the cure is permanently effected.

In the treatment of other diseases of a miasmatic origin, I have used Quinine with a great deal of benefit; but the detail would too much extend the limits of this paper. I shall conclude, therefore, by remarking, that I consider Quinine, variously combined to modify and direct its remedial virtues, the most valuable febrifuge of which we have availed ourselves in Western practice.

FACTS AND REFLECTIONS IN REGARD TO CHOLERA INFANTUM.

BY THE EDITOR.

(Continued from page 106.)

In the third number of this periodical, we made such pathological remarks, in relation to Cholera Infantum, as we thought the occasion required. Since then, we have perused the second part of "*Contributions to the Literary History and Pathology of Cholera Infantum*," by a writer in the New York Medical Gazette, and have concluded that the subject may be further considered with advantage. Because, it is said, that the liver is sometimes found in a healthy state, he appears decidedly unwilling to ascribe Cholera Infantum to a disordered state of that organ. In what way are we

to determine, if that organ is particularly deranged in this malady? By the symptoms of the disease, during life, or the lesions discovered after death? The study of the former will, doubtless, in a diagnostic and curative point of view, throw the most light on the subject. We have said that the secretion of bile is suspended, or if a fluid is poured out by the liver, it is a vitiated secretion. How do we know this? By the alvine evacuations, which are liquid, colorless, or of a slightly greenish hue. When colorless, the liver is torpid, and when of a greenish tinge, its action is imperfect.—Healthy stools are of the color of rhubarb, moistened with water, or the yolk of an egg, and as their natural complexion is dependant on the biliary secretion, any deviation from the color above mentioned, must be regarded as an indication of disorder of the liver. If this is not true, no good can result, in a curative point of view, from an examination of the stools, which every practical man knows is one of his most faithful guides in the treatment of disease.

But how do we know that the liver is not in all cases diseased? Authors assert it to be generally so; the writer to whom we refer, admits it, and may it not be possible for the liver to be functionally diseased during life, and yet leave no palpable trace of lesion after death? The stools are characteristically morbid, and the fluid in the gall-bladder equally so, and yet one of those who tell us that the liver was healthy, confesses that the gall-bladder was full of *pale bile.* Pale bile is no evidence of a normal state of the liver—healthy hepatic bile is of a light yellow, and healthy cystic bile of a deep yellow, verging to green.

From the pathological researches of M. Billard, it seems that the liver may appear healthy, and yet secrete a morbid bile. Of a dozen children, in whom the liver presented a healthy appearance, not being injected or infiltrated with a larger amount of blood than usual, he found the bile decolorized and slightly viscid in two; abundant, colorless, and as clear as serosity in three; small in quantity, and of a fine green in one; blackish and red, in two; small in quantity and of a clear yellow, in two; of a yellowish green and very viscid in two. The biliary secretion in these cases not only exhibited great variety, but, in most of them it was evidently morbid, and yet, we are told that the liver was healthy. This is impossible, and shows that anatomists may be easily deceived by appearances. To alledge that an organ is sound, when its secretion deviates sensibly from its

normal character, is absurd. That the secretion of bile is always either suspended or morbid in character, no one will venture to deny. We may be at a loss to determine the exact nature of the hepatic disorder, but we cannot doubt that it exists—the character of the secretion is sufficient proof of this, no matter how confidently the pathological anatomist may speak to the contrary.—Structures are liable, doubtless, to many alterations, which the scalpel has not, and probably, never will reveal. Even in fever, where there can be no doubt of the existence of hepatic disorder, as unequivocally indicated by the yellowness of the skin, the lesions of the liver rarely amount to more than slight injection, with blood, of its capillary vessels,—partial increase of its size, and some softening of its substance, which it may be supposed has resulted from inflammation. Further more it is said in the first paragraph of Dr. Thompson's "*Practical Treatise on the Diseases of the Liver and Biliary passages*," which we find re-published in Dr. Bell's "*Select Medical Library and Bulletin of Medical Science*," a work which we take pleasure in recommending to those that desire to keep pace with the progress of the science, that "as the peculiar functions of the liver and its appendages, the gall-bladder and the gall-ducts, consists in the secretion and excretion of the bile, the functional derangements of these organs must necessarily be referable to an increased, or diminished, or a vitiated secretion of that fluid; or to its impeded, altered, or deranged excretion. These various disturbances of the functions of the biliary organs, may, there is reason to believe, *occur independently of any perceptible alterations in their structure*, constituting what may, perhaps, with most propriety be denominated their *dynamical* derangements; cr they may occur as consequences of, or at least in combination with, obvious structural alterations." Solidists argued for years, that the blood was not altered in disease, because the chemist could not, by analysis, determine in what respects blood, in a state of health, differed from blood in a state of disease. This was an idle subterfuge, for the sensible qualities of that fluid were sufficient to satisfy the candid mind, that they are different; and the sensible deviations of the biliary secretion, from the healthy standard, are equally conclusive of the existence of hepatic disorder, the testimony of the scalpel, to the contrary notwithstanding.

There is something more in diseased organs than the scalpel can

ferret out, and that much more confidence is placed in the results at which it has arrived, than they are entitled to, is easily proved. Thus M. Billard found the liver in a congested state in twenty-eight children. In ten of them, the bile was of a dark green and somewhat abundant; in eight, very pale, as if decolorized; in two, mixed with blood; in three, inspissated, yellow, and as if concreted; in four, small in quantity, and of an ocre color; in one, in the gall-bladder, instead of bile, white and ropy fluid-like mucosities, were found. In many other cases of disease of the liver, apparently the same, the biliary secretion was very various, presenting no correspondence whatever with the supposed morbid states of the organ. Now, what are we to conclude from all this? Doubtless, that the researches of the pathological anatomist have thrown no light upon the precise and intimate nature of the diseases of the liver—that he judges from external appearances, when disease consists in altered molecular action, which his scalpel cannot detect or expose—that he infers health from the color and consistence of the organ, when the character of the secretion proves morbid molecular action—that from the imperfection of his modes of investigation, he often considers merely accidental circumstances, (such as color, consistence, &c.) because they are palpable, as essential and fundamental.

The mere circumstance, therefore, of not being able to find in the color or consistence of the liver, obvious evidence of disease, cannot be regarded as satisfactory proof that it is in a healthy state. A sound organ forms a healthy secretion, and this the liver does not do in Cholera Infantum. After telling us of 48 children, in whom green and yellow matters had been discharged, and in whom the liver exhibited various appearances, M. Billard asks, "ought these yellow and green evacuations to be regarded as an alteration of the biliary secretion? I believe that, whatever may be their color, they probably are symptoms of enteritis." They should, doubtless, be considered "an alteration of the biliary secretion," for the two-fold reason, that they are never seen when the liver is manifestly in a torpid state, and, in fatal cases, such matters have been traced throughout the intestinal tube, and into the ductus choledochus. Such "an alteration of the biliary secretion," may be of frequent occurrence in enteritis, but it would be difficult to prove that it is a symptom of that disease. It often enough happens,

that hepatic disorder is a concomitant of inflammation of the mucus membrane of the bowels, either as a cause, or a consequence of it, and this gives a very sufficient reason for the alteration of its secretion. This we say, because it is improbable that the yellow and green stools, referred to, are morbid secretions of the mucus membrane of the bowels. Its secretions, in the natural state, are colorless, and no facts, with which we are familiar, go to prove that they are susecptible of any such change.

"After stating the opinion of Dewees," says the writer of the article under consideration, "that diarrhœa depends upon a flow of bile, caused by heat," he (Billard) goes on to say:

"Why not endeavor to ascertain whether there really exists an afflux of bile into the intestines in this disease, and why not attempt to show, by anatomical researches, that the liver is irritated and ceases to discharge its normal functions." To these questions we would respond by saying, that in Cholera Infantum there is no afflux of bile into the bowels, while this disease is at its height—that the inordinate activity of the bowels is owing to the absence of bile from, and not to its abundance in them—that it is not owing to the admixture of acids with bile, that the discharges are rendered green, and that from M. Billard's own showing, anatomical researches are not very well calculated to reveal the real state of the liver in Cholera Infantum; for the facts, which he has himself furnished, prove that there is no correspondence between the varieties of biliary secretion, and the supposed morbid states of the liver.

We have said there is no afflux of bile into the bowels, while the disease is at its height. This is proved by the character of the stools, which are generally colorless, and sometimes only of a yellowish or greenish tinge. When there is an afflux of healthy bile into the bowels, there is always decided improvement, and so long as this fails to be the case, the disease is hourly exasperating.

The inordinate activity of the bowels is not owing to the presence of bile in, but to its absence from them. In regard to the agency of bile in promoting the periestalic action of the bowels, there is much error, I am persuaded, prevailing amongst physiologists and pathologists. Instead of increasing, bile diminishes the activity of the bowels. When present, their action is moderate, and when absent, generally inordinate. In lientery, the stools

are frequent, liquid and as colorless as milk, but so soon as bile appears in them, they become less frequent and more consistent. This is the case in all the varieties of cholera—the liver is torpid and the bowels irritable, and this state of the latter organs continues until that of the former is altered decidedly for the better. In many cases of diarrhœa the stools are colorless, and so long as this continues to be the case the bowels are morbidly irritable. In dysentery, we have uneqivocal indications of torpor of the liver, and of inflammation of the bowels. The alvine evacuations are destitute of bile, and so long as this continues, there is no hope of abatement of the periestaltic action of the bowels, or of the cure of the disease. From these facts it appears, that irritable bowels, so far from depending upon an afflux of bile into them, is owing to its absence from them, and that bile, so far from increasing the activity of the intestinal tube, diminishes it, and therefore exerts a sedative, instead of a stimulant influence upon them.

The idea that bile is an excitant of the periestaltic action of the bowels, has been chiefly deduced from what is observed in many cases of jaundice. In that disease, the contents of the bowels show no admixture of bile, and the bowels are often costive. This is frequently, but not universally the case, for Dr. Pemberton, in his "*Treatise on Diseases of the Abdominal Viscera*," says, that though without bile, they are often soluble, and we have more than once observed the same thing. Dr. Gregory mentions many cases of persons laboring under this disease, who went about their ordinary business, and performed all the functions, as if in a state of perfect health. We are informed by Dr. Stokes, that he has seen persons, who labored under this affection for more than a year, and yet had all that time their digestion good, *their bowels regular*, the flow of urine natural, and the circulatory, nervous, and respiratory systems apparently conformable to the standard of health. Dr. Blundell gives the cases of two children, who lived for four months, apparently well, and fed healthy; and, on opening their bodies, it was found that the biliary ducts terminated in a cul de sac, and that, consequently, not a drop of bile had been discharged into the intestines. Sir Everard Howe gives a remarkable case of the total absence of the gall-bladder, and no passage of bile into the intestines, occurring in connection with a perfect state of health.

In Colica Pictonum, although there is an ejectment of much bilious matter from the stomach, by vomiting, the bowels are obstinately costive. This is the tesmony of Dr. Pemberton, and several other writers, who have directed their attention to this point.

With these facts before us, what must be thought of the opinion of Mr. Phillips, to be found in a recent number of the *London Medical Gazette*, who says, "that one, if not the only great function of the biliary secretion, is to produce a fluid which, by its stimulating quality, shall excite the intestinal tube to contract upon and expel its contents"? We have seen, that the bowels are most irritable when there is the least bile in them, and that the afflux of the biliary secretion is sure to abate their excessive action;—that the bowels are often regular in jaundice, in despite of the absence of bile from their contents;—that the bowels, are constipated in colica pictonum, although bile is secreted by the liver, and ejected by the stomach; and now we have but two more remarks to make before concluding the consideration of this branch of the subject. If bile has any agency in exciting the periestaltic action of the bowels, those medicines that promote its secretion should be the strongest excitants of that action. But this is not the case. When there is a deficiency of bile, there is generally more or less irritability of the bowels, and this is diminished instead of being increased, by augmenting the biliary secretion. It is not those articles that promote the secretion of bile, that are the most actively purgative, but those that augment intestinal secretion; indeed, it is only in this way that medicines purge. Moreover, the opinion we are combatting makes the functions of the bowels depend upon the liver, which is absurd. Although the action of every organ is more or less influenced by the other structures, each organ has a particular vitality, in virtue of which, its peculiar functions are performed. One of those of the bowels, is that of a sewer to conduct out of the body matters, the retention of which in it would prove injurious, and they are provided with two orders of muscular fibres, the harmonious action of which constitutes their peristole, that is but little influenced by the nervous system,—and continues even after the bowels are removed from the body.

There is no reason to believe that green stools result from the admixture of acids with the bile, but there is every reason to consider such evacuations a vitiated biliary secretion. Abernethy, Ayre,

and others have traced such matter throughout the intestinal tube, into the ductus choledochus, and into the gall-bladder. Dr. Mills, in his work on "*Disorders of the Brain*," speaks of a case, in which he says:—"During the illness, the feces were greenish; an appearance commonly imputed to the use of calomel, (not a grain of that article was given,) but which is more properly referable to the condition of the bile; green bile was found in the gall-bladder and ducts, whence it was traced to the small and large intestines, every where tinging their contents with a green of a deeper or a lighter shade, according to the quantity and nature of the matter with which it was mixed." Nothing is more common in fatal cases of hydrocephalus, than to find green bile in the bowels and gall-bladder.

In regard to the lesion of the mucus membrane of the bowels we have already spoken, in the foregoing part of this article, and will merely remark here, that while we admit the frequency with which it is found, we have, in perusing the paper referred to, seen no reason to alter our opinion. Besides the indefiniteness of its nature, in many cases we have no proof that it is essential or fundam ental in Cholera Infantum. The intestinal canal in this disease is strikingly resemblant of its condition in those that have died of starvation. In both, there are discolorations of various kinds—in both, the bowels are much contracted, and in both, there are portions very pale and others that are softened. In both, there is great exhaustion before death, and we know there is no structure in the body, in which congestion so often takes place as in the mucus membrane of the bowels, when there is great debility, or the blood encounters any difficulty in finding its way to the heart. These facts should render us very cautious, not only in concluding inflammation from mere discoloration, but should cause us to distrust pathological anatomy as a guide in practice.

If enteritis is fundamental in Cholera Infantum, what should be the practice? All will respond, leeches, gum solution and sugar and water, than which, no remedies would prove more inefficacious. Whether the liver is disordered or not in this disease, all physicians, at least in the United States, act on that presumption. They differ in the manner of using calomel, but they agree in regard to its necessity, and they give it, not to subdue enteritis, but to rectify the supposed disorder of the liver. Unless it succeeds in

doing this, they know all other expedients will fail. It is generally successful, and when it does produce an aflux of bile into the bowels, they look upon all danger as averted, and the ultimate result proves the correctness of the prognosis. It is useless, therefore, for pathological anatomy to assert, that a disease is seated in one place, when therapeutics proves that it is in another. It may serve very well to build sophistical arguments upon, but not as data from which to deduce sound practical principles—it will often embarrass and confound the physician, but will rarely serve as a faithful guide to him in practice. In opening a dead body, the pathological anatomist fancies he is opening the book of nature. This may be so, sometimes, but very often he is opening a book as much the work of human hands as those that are found in our libraries. Deferring the consideration of this topic to a future article, we quote, with entire approbation, Dr. STEWART's sentiments on this subject, although the writer in the N. Y. Medical Gazette expresses surprise that he should entertain them. Dr. Stewart remarks:—

"How important soever the ultimate effects of deranged action, the destruction of a part exhibited on autopsical examination may be,—and none can be more sensible of their importance than the author,—it is evident that too much reliance has, in some instances, been placed on these revelations, as the only guide for us in practice, without duly considering that they ought rather to be regarded as the effect of previous diseased action. Disorganization of structure is the evidence of the loss of vitality in the affected part; it is the consequence, not the essence of the disease; we should not, therefore, regard this condition as in every instance giving all the information we need, and as our sole guide in the treatment, but only as a mark of what has pre-existed, and which alone we are to consider as the disease. *Anatomical investigations* are of great value in detecting the changes which occur from diseased actions in the various tissues,—to determine the nature of these alterations and their relations to the symptoms, but *are of little use in ascertaining the nature of disease producing these alterations.*"

Not only is the opinion which Dr. Stewart holds in regard to the merits of pathological anatomy correct, but its truth appears to us to be proved by the conclusion to which the writer, who expresses surprise that he should entertain it, has arrived. If Cholera Infantum is an enteritis, then has the experience of the physicians of the United States proved wholly unavailing in throwing light upon its treatment. This has been such as no rational man would follow in common enteritis, and as it has, instead of

proving injurious, been found generally very useful, it is certain, that either his pathology is erroneous, or a knowledge of the nature of the lesions that exist in this disease is of no service in its treatment.

In regard to the treatment of Cholera Infantum, the reader is already aware, from the view we have taken of its nature, and from what we have said in our article on the sedative action of Calomel, that we do not confide in the infinitessimal doses of the late Professor Dewees. We have invariably given calomel in such a dose as to enable it to exert its sedative influence on the stomach and bowels. Eight or ten grains will often lay on the stomach, when minute doses would be rejected, and will restrain the action of the bowels even before it will be able to alter or improve the character of the stools. Very small doses, I am satisfied, irritate and tend to keep up the inordinate activity of the intestinal caal, and panssing, as they do, under such circumstances, more rapidly the system, they do not produce a beneficial impression on the through liver so quickly. Not only days, but sometimes more than two weeks elapse before any decided impression is made on that organ, and in the mean time, the patient, if he does not die, is rapidly exhausting, and if he ultimately recovers, the convalescence is slow and tedious, and often cold weather will have set in before he is entirely restored. We have seen much of this disease in the south, and many cases of it in this county, and have learned from observation, that a decided impression made on the liver, within a few days after its onset, rarely ever fails to abridge its course very much.

We have rarely given less than six or more than ten grains of calomel, with the half of these quantities of prepared chalk, every six, eight, or twelve hours, according to circumstances, and such doses persevered in, from three to five days, have almost uniformly succeeded in bringing down stools that indicated the presence of the biliary secretion. This is always favorable, and until it does happen, there is never the slightest indication of improvement. The first secretion produced by calomel, particularly if the liver has been torpid, is never healthy bile. The stools are of a dark or brown color, liquid, and never of the natural odor; indeed they are often inodorous. These indicate that the liver is acting, but still inefficiently and improperly, and therefore, the mineral should be persevered in, and it will be found that the biliary organ gradually

resumes its proper office, as is evinced by the successive changes, for the better, that the alvine evacuations undergo, and the marked improvement which is daily observed in the general character of the case. The stools, under calomel, become more consistent, are more offensive, but still are of too dark a color. Presently they become so acrid as to excoriate the antus, and this circumstance is often a cause of alarm to the physician, as well as to the friends of the patient; but dark, consistent, and offensive stools, although they sometimes excoriate, never do harm or threaten danger, and are an unequivocal indication of energetic action of the liver—that bile exists in the stools in a very concentrated state, which is a sure guarantee that rapid improvement will follow. After the passage of such evacuations, their color will progressively become less and less dark, until they will be of the color of the yolk of an egg.—When this happens, the use of calomel should be discontinued—it has accomplished all that should be expected from it, and to persevere in it longer, would be to do harm. Under its use the liver has resumed its healthy office, and with this the physician should be content. Now is the time to use mild tonics, for the purpose of imparting strength to the chylopoetic organs, and of promoting convalescence. Used before the rectification of hepatic secretion, they are apt to cause the congestion of the mucus membrane of the bowels to pass into inflammation, and if the latter lesion already exists, to exasperate it.

I have been somewhat minute in describing the changes through which the stools pass, for a particular reason. I wish to show why relapses are so frequent in Cholera Infantum—why, when a child has an attack of this disease, it is so apt to have a series of them during the season, and is rarely entirely exempt from all the symptoms of it before the weather becomes cold.

The elements of bile exist in the portal blood—these consist of the refuse and effete matter of the fluids and solids of the body, and the liver is exclusively a depuratory organ. In attestation of the truth of these allegations, the limits of this article will not suffer us to advance the proof; but an opportunity to do so will be embraced in a subsequent number. Taking them, for the present, as granted, we shall find no difficulty in giving an explanation of the frequency of the relapses or succession of attacks to which we have referred, and this we shall find in the fact, that

many of the cases of Cholera Infantum are palliated, but not cured.

External heat is the chief cause of this disease. It stimulates the skin to excessive action, and, consequently the liver, because of the close connexion that exists between the functions of those two organs. Over exertion weakens them, and then causes, which, under other circumstances, would have no injurious effect, are sufficient to suppress perspiration, and, as a consequence, the secretion of bile. This, as already explained, prevents the free transmission of blood through the liver, and causes, in a short time, congestion of the mucus membrane of the alimentary canal. Now, if the liver is a depuratory organ, an excretion is retained, which cannot fail to prove injurious. Not only is it retained, but if bile is formed of the refuse matter of the solids and fluids, its elements must accumulate abundantly in the venous circulation, and that, too, more rapidly than under circumstances of ordinary health, if it were possible for such a thing to be in connexion with a torpid liver, for the quantity of blood being hourly reduced by the frequent alvine evacuations, interstitial absorption must be much invigorated, and the amount of effete matter carried into the venous circulation must be greater than usual.

Calomel is, therefore, given for the purpose of enabling the liver to eliminate this refuse matter, which it is more effectual in doing than any other remediate agent with which we are acquainted, and it is because of the removal of all that portion of it which is incompatible with health, that the stools ultimately assume the natural complexion. Now, physicians, so far as my knowledge extends, are not guided by this circumstance in the employment of calomel. They either stop short of it, or go beyond it, and in either event they do harm. Indirectly in the former, and directly in the latter case. The rectification of hepatic action is the object we aim at in using this mineral, and we consider that we have accomplished that object, whenever the stools become natural in color and odor, and nearly natural in consistence. As we have nothing at present to do with the evils which never fail to result from persevering in the use of calomel, beyond the proper time, we shall confine our remarks to those that result from suspending its employment too soon.

Whenever in Cholera Infantum the stools become of a dark green color, and at all consistent, the vomiting and the morbid activity

of the bowels abate, and there is so decided an improvement in all the symptoms, that physicians in general, consider the disease subdued, and commence at once to give tonics and nourishment. Now, if there is any reason in what we have said in regard to the source of, and the manner in which the elements of bile accumulate in the venous circulation, it is evident, that this practice must be injudicious. Retained excretions are sure to prove injurious by the irritation they produce, and consequently the functions continue to be performed languidly, and the strength returns very slowly. In this state, very slight indiscretions are sufficient to bring back torpor of the skin and liver, with the train of symptoms that result from it. This would not happen, however, if the disordered action of the liver was completely corrected by a perseverance in calomel, until the stools assume the character which we have described. Then, under mild tonics and nourishment, convalescence is rapid, improvement is permanent, and by proper attention to diet, exercise and airing, the child will pass through the remainder of the hot months without any return of the disease. A complete re-establishment of the functions of the liver is, therefore, absolutely necessary to avert a relapse, or to prevent a subsequent attack.

That calomel, in some form, is more entitled to confidence, in the treatment of Cholera Infantum, than any other remedy with which the profession is acquainted, I believe is universally conceded by those who have seen most most of its effects, but that it is able to exert complete control over all cases, no one, I presume, would venture to alledge! A curious and interesting case of this kind occurred within my knowledge. A child, during the second summer of its existence, was attacked with Cholera Infantum. I believe it was treated, from the beginning with calomel, and certain adjuvents; but from this course, no good resulted, and after it had been sick five weeks, I was called in consultation. Then its situation was deplorable—scarcely any thing would remain on its stomach—its bowels were irritable, but not so frequent, while they were full as liquid and destitute of bile as they had been—exhaustion and maciation extreme. I could make no suggestion. As it had been asking for pine-apple cheese for nearly two weeks, and as the case was considered utterly hopeless, it was concluded to gratify it. This was done, and instead of injury, decided benefit resulted—

the child improved, and in two weeks, having consumed nearly the whole of a pine-apple cheese, without medicine, and with scarcely any thing else, it was not only out of danger, but nearly well.

By the use of the cheese, the bowels were restrained, and in two days after its use was commenced, the liver commenced acting, as was evinced by the character of the alvine evacuations, which, from having been colorless, became of a greenish hue. From this time improvement was decided and rapid—the stools daily approximating more and more the healthy standard.

BIBLIOGRAPHICAL NOTICES.

A Physiological and Pathological Inquiry concerning the physical characteristics of the human Teeth and Gums, the salivary Calculus, the Lips and Tongue, and the Fluids of the Mouth, together with their respective Local and Constitutional Indications. As read before the American Society of Dental Surgeons, at their second Annual meeting, held in Philadelphia, August 11, 1841. By CHAPIN A. HARRIS, M. D., D. D. S., Professor of Practical Dentistry, in the Baltimore College of Dental Surgery, &c. &c. &c.

This little volume, consisting of 119 pages, we have perused, with some care, and consequently feel authorized to say that it is, so far as we are able to judge, a brief but comprehensive and satisfactory account of the physiology and pathology of the fluids and solids of the mouth. The topics of which it treats are quite as interesting to the general medical, as to the dental practitioner, and we would, therefore, be pleased to see the work encouraged by the former. This is the more necessary at present, as an effort is being made in the United States to put down dental quackery, and to place dental medicine and surgery upon a liberal, and an enlightened basis, and, therefore, the physician should prepare himself by the study of scientific works on dentistry, to distinguish between the impostor and the enlightened dental practitioner. Reference is commonly made to physicians, by the people in regard to those who desire to practice dentistry, and too often, the referee is about as uninformed on the subject, as the referer, but

this does not prevent him giving an opinion, which is too often greatly to the prrejudice of a profession, in the practice of which many educated and experienced men are to be found. A perusal of the little work of Dr. Harris, particularly the "Introduction," will satisfy the candid and liberal of the truth of this remark, and it should be the business of the physician to multiply them as much as possible.

A Practical Treatise on the Diseases of the Liver and Biliary Passages. By William Thomson, M. D., *Fellow of the Royal College of Physicians and Surgeons, and one of the Physicians to the Royal Infirmary, Edinburgh.*

The work, the title of which heads this article, has been republished in "*The Select Medical Library and Bulletin of Medical Science*," edited by Dr. Bell, of Philadelphia. We have marked several paragraphs in this treatise, on which we design to comment in a future number, and for the present, therefore, we shall rest satisfied with the following extract of the preface, by Dr. Bell:

"The work of Dr. Thomson is a good measure of the state and fashion of medical investigations at this time. It evinces pathological precision in the history of the several diseases and disorders of the liver, of which the most essential characters only are given; with, at the same time, a rational scepticism on many reputed diseases of this gland, which are really dependent on disorders of the stomach, duodenum, and the other parts of the intestinal canal. All this is in strong and advantageous contrast with the speculations and hypotheses respecting the alleged importance of the liver in a great many affections in whose origin and continuance it had no share, and for whose removal it need not and ought not to be specially acted on by remedies."

Introductory Lecture to the course of Chemistry, delivered by Prof. Draper. *Published at the request of the Medical Class.*

This lecture is sufficiently brief, and is written in a neat style, and evinces a very creditable ardor in the pursuit of knowledge. The Professor remarks, "There are, gentlemen, few things which

can bring more gratification to a public teacher, than the marked attachment of his pupils." To this declaration we unconditionally subscribe. There is no pleasure more soothing to feelings, irritated and soured by unkind treatment—no reward more acceptable to the heart that feels the strong impulses of a manly and dignified ambition, than to be hailed with joy, by the honest and grateful acclamations of those whose minds you have endeavored to enlighten with the truths of science, and whose thoughts you have desired to train in the ways of sound philosophy. Young, ardent, and generous Students of Medicine, rarely fail to love and admire those who have ability, and evince a strong desire to teach them. Impressions thus made, are seldom transient in their nature, or unproductive in their consequences.

Professor Draper seems ambitious to show how exceedingly important Chemistry is to the physician, and although he speaks with zeal, and illustrates his positions with exceeding facility, we confess the force of his arguments, and the luminousness of his illustrations, have not prevailed with us to adopt his views. Indeed, he seems himself to think, that Chemistry of itself, does not possess sufficient interest for those who are aiming to become physicians, for he says: "Under the guise of a course of lectures on Chemistry, I mean to teach you the application of physical science to medicine—it matters not whether it be Hydraulics, Pneumatics, Astronomy, or anything else." Thus the Professor will doubtless be able to furnish a very varied and *recherche* course of instruction.

We scarcely consider ourself entitled to an opinion on this subject, and, therefore, with becoming modesty, we decline speaking *in propria persona* of the claims of Chemistry to the attention of students of medicine, but we will take the liberty of recommending to the consideration of our readers, the following remarks by the Editor of the *London Medical Gazette:*

This study was probably at first regarded as important in medical science, from the relation which at an early period of its history it had to drugs; by the same rule that leads persons to write themselves chemists and druggists, who considering their perfect ignorance of chemistry, and the character of their trade, might better be called grocers and druggists. This intimate connection has long ceased to exist, and the science now called chemistry has not more practical application in medicine than natural philosophy has. For what is the general plan of a course of lectures on chemistry, as at present given (in many instances by persons knowing nothing of medicine) in our schools? Why—the first half of it is occupied by the subjects of heat, light, electricity,

and magnetism—no one of which is at all *necessary* to the medical practitioner, and the applications of which are scarcely found, except in the highest class of physiological inquiries. Let us not be misunderstood; we speak here only of the practitioner. None would be more glad than we to see the profession composed entirely of men of true science, but if only three years can be afforded for its study, it is chimerical to look for such a consummation. The time would be insufficient, even though well employed, to make more than a moderately good chemist; then what prospect is there that every student should become, not only a chemist, but a botanist, anatomist, physiologist, medical jurist, and be besides that which is alone his business to be—fit to practice his profession?

It is certain that, in the present state of things, philosophical chemistry cannot be efficiently learned, unless at the expense of neglecting some subject of more importance: is it then, so necessary, or is its utility so great, that it deserves to be specially retained in the curriculum of medical education? All the *practical* applications of chemical science may be well and safely made by those who are ignorant of its theories, and of the explanation of the processes, which they may nevertheless direct with the most marvellous accuracy and tact. The dyer, the brewer, the gas factor, and a hundred others, are daily directing and applying processes, whose explanation, if known, is possible only by a knowledge of the highest laws which chemical investigations have as yet discovered. And it is proverbial that he who has a merely practical knowledge of his business, will produce a far better article than he who possesses a knowledge of the science short of the very highest grade as yet attained.

But we need not risk offending ourselves and our fellow practitioners, by saying that we might in this respect follow the example of tradesmen—we will rather think that they do as we do. To consider for an instant, not the attainment of students, but the knowledge possessed by advanced and esteemed practitioners: how many of the physicians, surgeons, and general practitioners, whose rich income testify their full ability to carry on their profession with credit, can employ the knowledge which they with such labor acquired in their pupilage? How many could accomplish a correct analysis of a mineral water, or detect a poison satisfactorily in an organic mixture? We will venture to answer —not one who has not made the subject one of special study subsequently to having received his diploma. A man may quite opportunely prescribe or dispense an effervescing draught, without knowing the laws of chemical affinity, or of atomic combination—or direct damp cloths to be applied, without recognizing in this practice an application of the doctrines of latent heat; in the same manner that he may apply a tourniquet without knowing the principle of the screw, or reduce an old dislocation, when ignorant of the mechanical properties of the pulley.—Lecturers on chemistry, indeed, say the one cannot be done, and professors of mechanics aver with equal firmness the impossibility of the others; but we rather think we have seen them all accomplished by those who were quite innocent of any scientific knowledge of the subject. We need say no more to prove that medicine may, in all its branches, be safely and well practised without a knowledge of the *science* of chem-

istry. Then, should it be retained in its present form in the general course of medical education? For the discipline of the mind, either chemistry or natural philosophy would be, in the highest degree, useful: but the mind should be disciplined before the main study of medicine commences; and one of these sciences might be made the subject of attention during the otherwise vacant hours of the apprenticeship. It would matter but little which was chosen; but we would select natural philosophy, because it can be more easily studied without expensive apparatus, and does not at all enter into any other course of lectures.—Then, all that is most useful in chemistry might be taught in the lectures on Materia Medica and Forensic Medicine. The former course, indeed, can never be made to extend to the 100 lectures, so absurdly required, without pressing into the service matter from every surrounding source: medicine, surgery, anatomy, chemistry, natural history, must all be made to lend their aid, to expand the otherwise dry subject into its proper space and time.* The time occupied in this course, viz: 100 hours, would be quite sufficient to teach the student as much as he now learns by the 100 of chemistry, the 100 of materia medica, and the 50 of botany, together. We would refer to the admirable lectures, the publication of which is now nearly completed, by Mr. Pereira, and ask what point of practical importance in therapeutics, in chemistry, botany, or even natural history, is not there treated of? What a luxury would it be to the student, and what a benefit to the public, if 150 of the precious hours of his short period for study, could be taken from subjects which, as they are at present cultivated, we hold to be nearly useless, and given to the clinical pursuit of the practice of his profession!

The Concluding Lecture on the Theory and Phenomena of Heat, being part of the course of Chemistry, delivered by Professor Draper.

This is an interesting, very well written, but rather too imaginative a lecture, to constitute any part of a didactic course of instruction. It appears to us that it would have answered much better as an introductory, in which Professors often take the liberty of travelling very far out of the record. Though we object to the occasion on which Professor Draper delivered his lecture, we do not wish to be understood, as finding fault with its matter, or its manner—for, in truth, both, are exceedingly good. Indeed, we agree with him in opinion, that this vain-glorious age should be severely rebuked. Too many are inclined to believe that all that

*We know that a learned professor on this subject once devoted six lectures to the subject of Captain Parry's voyage to the North Pole.

is meritorious is modern, but if they were to take the trouble to inform themselves on the subject, they would find but few things which are true, that are new—that during or prior to what are calumniated as "the dark ages," many of those inventions and discoveries were made, that are traced no farther back than the revival of letters in Europe, and which now minister in so many varied ways to the comfort and happiness of mankind.

"*Third Annual Report of the Directors and Superintendent of the Ohio Lunatic Asylum,*" *Columbus, Ohio, pages* 60, *octavo.* "*Should Insanity be a subject of Clinical Lectures in Lunatic Asylums?*"

Having been favored by Dr. Awl, the Superintendent of this noble state institution, with all his reports, we are prepared to express our unqualified opinion of the high success attendant on his exertions, in this benevolent enterprise. We know something of the kind of patients that came under his supervision, in the opening of this establishment, having been derived from a miserable receptacle attached to the Commercial hospital at Cincinnati, designated as a Lunatic Asylum, and then, the only one, even in name, in that state. These patients were chiefly of the most hopeless character, and the number has been increased necessarily in the lapse of several years.

The fundamental principle in the Ohio Asylum, is *incessant care and kindness to the inmates;* and this is secured by selecting the *right kind* of assistants, and the *proper number*, to carry out the principle to its fullest practicable extent, fearless of the *cost* of the experiment. The number of assistants, attendants, &c., including the Superintendent, his assistant, the Steward and Matron, compared with the number of patients, is something more than five. As a consequence of this extensive provision, coercion and restraint are almost wholly unknown in the Asylum, in any form, excepting the very rare use of a darkened room for a furious patient. In addition to personal attention and kindness, every sort of device, calculated to amuse and interest the patients, is resorted to. Libraries of useful and pleasing books, some eighteen or twenty newspapers and periodicals, regularly received by mail, are at the service of all who are fit to partake of this kind of ex-

ercise. Family worship and public worship are punctually attended to, and exert a most benign influence. There are weekly parties also kept up by the steward and matron, to which suitable patients are invited, and these exert a salutary influence. Various kinds of work are carried on by both sexes in and out of doors; and in short, every thing is done, that could be devised to secure the comfort and final recovery of the unfortunate inmates. They are treated as members of a large family, bound together by the common interests of humanity.

The total number of patients in the last year, was one hundred and forty-three. Of all, whose insanity had been less than one year's duration, the percentage of cures, is over 83, notwithstanding the prevalence of Epidemic Dysentery, of which several died.

Although the State appropriates some twelve or fifteen thousand dollars annually to this charity, the Superintendent has clearly shown, that this liberality is an actual saving. He has done this, by selecting twenty of the most recent cases that have been received; and twenty old cases that have long been a charge to the public, and are yet uncured. At *three* dollars per week, the expense of supporting the first named twenty, until restored, was, in the aggregate, one thousand two hundred and eighty-one dollars, being an average of sixty-four dollars and five cents, each. At *two* dollars per week, the twenty old cases, prior to their admission, cost, in aggregate, twenty-eight thousand two hundred and eighty-eight dollars, being an average of one thousand four hundred and fourteen dollars and forty cents, for each. These calculations, besides proving the economy of a liberally supported Asylum, shows the vast importance of losing no time in putting insane persons, under its kind and fostering care. Insanity is curable, just in proportion to its recency; and very recent cases are as curable as those of any other form of disease. The statistics settle this point, conclusively.

We should like to quote largely from the excellent report of Dr. Awl, but have not space, for the purpose. It shows most triumphantly what can be accomplished, even by mere novices in such an enterprise. To the Directors of the Ohio Asylum, and equally so to the indefatigable Superintendent, this was a *novel* task. And yet, with three years of experience, their success is almost equal to that of the most successful institution in the world.

We cannot forbear, in this connexion, to notice the vast impor-

tance of *teaching insanity* to medical pupils; and as a matter of course, the necessity of establishing regular clinical lectures for this purpose, in such institutions as may be most suitable for the object. That we may not appear singular, nor visionary, we quote from the following authorities, and beg the attention of all candid persons to this matter. The *London Lancet* is held to be one of the ablest medical journals in the world, and is conducted by a member of the British Parliament, who has been laboring for years, to reform abuses in the insane establishments of Great Britain. In volume 1st, for 1839–40, page 652, we find these remarks. "We have but one recommendation to add, and that is, that the Asylum, be rendered accessible to medical students, under liberal regulations. It is of importance to the community, that the nature of insanity should be well understood. The certificates of two medical practitioners will consign the father of a family to confinement in a lunatic asylum; yet insanity is excluded from the wards of clinical observation, the student is shut out of the lunatic asylum, and during the period of his studies, has absolutely no opportunity of making himself acquainted with this most important and formidable disease."

As evidence of his regard for the sentiments of the author, Dr. Bell copied the whole article from which the above is extracted, into his *Select Medical Library*, published in Philadelphia. In the *Lancet*, for October 1838, the same editor thus speaks out:— "When it is considered, that the question often is, not whether a patient is insane, or monomaniac, but whether he should be confined in a mad-house or allowed the moderate exercise of his will in society, grave apprehensions arise, particularly as the great majority of *medical students are excluded*, from the public asylums, and thus *expressly prevented* from *studying mental diseases.* What is the consequence of these arrangements? Not only are lunatics ill-treated and rendered incurable, but hundreds are under confinement who ought to be free."

In the *British and Foreign Medical Review*, volume 7, the learned editors notice, in one article, no less than sixteen publications on Insanity, of which three are from the United States of America; on pages, 34 and 35, we find the following remarks. "We observe in *Esquirol's* volumes, occasional regrets expressed that so little effort is made to make lunatic asylums, places of instruction for pupils. Mr. *Farr* also alludes strongly to this subject. Of

the practicability of this, under certain obvious regulations, no doubt seems to be entertained by him; and a similar opinion is given by Sir W. Ellis, and Mr. Browne, whose work on lunatic asylums, we noticed in a former number. This subject was earnestly advocated ten years ago, by the professor of medicine of the London University. Up to this period, very little has been done to facilitate the requisition of a knowledge of the practical details of the very serious class of mental disorders: and although the interests of the public imperiously demand, that medical practitioners should be furnished with more exact notions and indications of treatment in the various cases received into asylums for the insane, there has not yet been found sufficient moral courage in the managers of any of the great public institutions, or sufficient enterprise in any medical school, to establish clinical instruction on a scale sufficiently extensive, or a plan sufficiently systematic to diffuse a general acquaintance with the phenomena and therapeutics of insanity." Again, on page 48: "This publicity, if in one sense useful, is to us a far less noble recommendation, than would be the circumstance of that large institution being at once the best conducted *hospital* (not merely an *asylum*) for madness, and the spot on which a number of diligent students were ever imbibing the principles of rational treatment, to be by them diffused over the whole kingdom, or over the whole world. This would be an object worthy of their philanthrophy; it would act as a stimulus of a most salutary kind on the medical officers, and be the source, as we really believe, of incalculable benefits to society."

"Edinburgh Phrenological Journal," volume 9th. The title of the paper now to be quoted from, is, *Suggestions for facilitating and extending the study of mental derangement, and improving the treatment of the insane.*" The writer says, "I would recommend that the Lunatic Asylums for the poor should be thrown open, under judicious restrictions, for the attendance of a limited class of students. The city of Dublin is provided with two large and well conducted establishments, of the description alluded to; and medical students, if permitted to visit them and there observe the symptoms and progress of the cases, would evidently be better qualified than they are at present, to give opinions in courts of law, as to the sanity of individuals, and to superintend the management of cases entrusted to their care." After noticing some objections, the writer proceeds, page 311, to say, "But if there can be found

amongst medical students, as I believe there can, some ardently desirous of obtaining information on every subject connected with their profession, and willing to submit to every wholesome restriction, which the governors, medical and moral, may think fit to impose, then I am satisfied that the doors of these institutions may be thrown open to such students, without injury to the patients, and with advantage to science."

The last authority to be quoted, at this time, is the well known Spurzheim. Others, not less relevant to the point, could be cited, but we deem it unnecessary. On page 216, of his work on Insanity, Dr. S. thus writes: "I should propose to erect such hospitals in the neighborhood of places where the medical schools exist, in order to give opportunity to medical students, to become acquainted with this important branch of medicine."

In addition to these sources of information, it is known to the older members of the profession, that for at least forty years, the lunatics in the *Pennsylvania Hospital*, located in Philadelphia, have been the objects of clinical instruction. More than thirty years ago, the writer followed Professors Rush and Barton, to the different cells of the insane, and heard the prescriptions and remarks on each case; and this was the practice, twice in every week.—These were truly, *clinical* (or *bedside*) lectures, and were valuable. At that time, the present mode of giving clinical lectures was not in use; and although but thirty or forty pupils could get near enough to the patient, to profit by the instructions, the facts show, that the kind of teaching on insanity was fashionable in the institution, which was the very first in America, in which lunatics were admitted, as patients. If in a hospital, so proverbial for good management and strict discipline, clinical lectures were given as already stated, who will deny, that the same kind of instruction might be more profitably imparted in a commodious room, large enough to seat one or two hundred persons? Appended to this query, we add, as matter of fact, that very great success attended the management of the patients, in this ancient hospital.

Those who know nothing, or very little, practically, about Lunatic Asylums, think that harm must necessarily grow out of the visits of any but the regular officers of the institution, which generally do not exceed a half dozen. But if we examine the reports of the *Connecticut Retreat*, which has been pronounced by Europeans, as well as by Americans, to be "the most successful estab-

lishment in the world," we shall find, that instead of from four to six authorised visiters, there are not less than from fifty to sixty. There are first, some *twenty life Directors*, about as many more are chosen, *annually*, *three State Commissioners*, *six Visiters*, *three Managers*, and a *visiting Committee of six ladies.* All these persons are expected to go to, and through the Retreat, when they please.

Any one who will take the trouble to examine the Journal of the Medical Convention of Ohio, when than body last assembled at Columbus, will find that the Superintendent of the State Lunatic Asylum, gave a public invitation, to visit the Institution, in mass, and that the invitation was cordially met. The convention consisted of nearly fifty persons, and as a result of their inspection and observations made on the occasion, sundry propositions for additional appropriations were ordered to be sent to the legislature, then in session. If the convention should see fit to meet in Columbus, every year, we feel confident that the same course would be adopted, even though its numerical force should be doubled or quadrupled. Does any one believe, that the intelligent and eminently successful Superintendent of the Ohio Asylum would so act, if he entertained a doubt as to the effect of such a concourse of visitors? That gentleman knows full well, that such patients as are fit to see company at all, would be benefitted by interviews of this very character.

The public mind seems yet to be partially attainted with the false and pernicious notion, that lunatics are wild beasts, and that they cannot be approached with safety. The experience of the civilised world, for the last twenty years, proves that they are *men* and *women*, still, and that the true mode of rectifying their disordered minds, is to treat them *as such;* and to restore them, as fast as practicable, to their former standing in social and civil society. The institutions that practice on these fundamental principles, will succeed, and be blessings to mankind, just in proportion as they adhere to, and carry them out.

MONTHLY PERISCOPE.

Strictly Animal Diet requisite in Diabetes.—In the Edinburg Monthly Journal, is to be found an able paper, by Dr. C. Christison, in which four cases of diabetis are detailed. This we have not space to hnotice, further than to direct attention to his remarks on diet:

If a sensible amelioration is to be looked for with any confidence, the injunctions of Rollo, and his imitators, to enforce a rigorous animal diet must often be faithfully followed. This object it is by no means so difficult to accomplish as might be thought, provided some variety be allowed, and articles be avoided which are hard of digestion, or abound too much in fat. In the present case no very decided amendment was observed for two months under a general diet: but under a pure animal diet, which, so long as the man was under my notice, seemed to be followed by him without reluctance and with fidelity, the characters of the urine improved essentially in a few days; and the improvement was afterwards steadily maintained.

Pernicious effects of Powerful Remedies in Chronic Diseases.—In this country there is not a more deplorable error than the active perturbatory treatment, pursued in almost all diseases—mild as well as malignant—chronic as well as acute. Heedless of the facts that chronic diseases, effect a lodgement in the system, in a slow and gradual manner—that although their encroachments are insidious, they are certain and progressive—and that they often take complete possession of the economy before any indication of danger is given, intemperate efforts are too frequently made to counteract or remove them, by the rude and violent means that are resorted for the purpose of strangling acute affections at birth. Most chronic maladies, though they generally display their violence in particular parts, are of constitutional origin, and depend upon, or consist in the bad materials of which the tissues are composed. In their removal, medicines, properly so called, are of but little utility —if they are cured, it will be mainly by diet and regimen. The system must be renovated—the old and bad materials of the body, must give place to new and better. We therefore, commend the cautious and temporising treatment of M. Forget, to the consideration of the practitioner, who says:

In truth, how many paralytic patients sink under some cerebro-spinal lesion excited by stimulating remedies of the nervous system, such as strychnine for example! How many phthisical patients fall a sacrifice

to a colliquative diarrhœa. aggravated by the use of pretended incisive and solvant (fondants) medicines, as alkalis, which only serve to irritate the mucous membrane of the stomach and intestines! How many dropsical patients suffer from the use of drastic purgatives, or of powerful diuretics and diaphoretics, all of which must primarily act on the alimentary canal! How many unfortunates, laboring under some organic disease of the heart or liver, or spleen, are poisoned by the injudicious administration of digitalis, mercury, iodine, &c.! and lastly do we not often see the system undermined by the continued use of arsenic and other irritants in hopeless cases of cancer and other incurable disorders!

It would be easy says M. Forget, to extend, the catalogue of this lugubrious litany, known only to the consciences of medical men. Much evil has resulted from that perfidious maxim of Celsus, "*Melius est anceps remedium adhibere quam nullum,*" there is much sounder wisdom in that which inculcates upon us, "*primo non nocere,*" and in the advice of Stoll, "*Nil magni facias ex mera hypothesi.*"

Some, we know, will object to these remarks which we have now made, and charge us with unnecessarily abridging the useful exertions of the physician. It is not the use, but the abuse, of remedies that we are condemning. Even in the case of hopelessly incurable diseases, much may be done by the judicious medical man in the way of soothing pain, calming mental distress, and sweetening and even prolonging life: such is one of the most holy duties of our noble profession.

When Sydenham said, that without opium he would renounce practice altogether, he no doubt had in view the long and mournful catalogue of chronic maladies, the suffering from which may be so often mitigated by this and other analogous medicines. Let us learn then how to assuage the pains which we cannot prevent, and even when we fail in our best endeavors, let us learn how to console the sufferer.

As to the means best fitted to limit, if not to arrest, the ravages of incurable diseases, they may be all deduced from an important law of pathology, which is far too little understood and acted upon; it is that many chronic maladies prove fatal by the complications which they call into action. Thus apoplexy often kills by the softening of the cerebral substance induced by the extravasated blood, which has been acting like a foreign body; pulmonary tubercles excite a subacute inflammatory action in the surrounding parenchymatous tissue; aneurism of the heart and hyperthrophy of the liver, by the serous and sanguineous congestions which they give rise to; and cancer, by the exhaustion of the whole system, and by the cachexia brought on from the absorption of ichorous matter into the blood.

Without, therefore, vainly persisting in attempts to withdraw the cerebral coagulum, the removal of which can only be the slow work of Nature, let us strive to combat the congestion that is induced by this fatal thorn; without trying to melt away rebellious tubercles, it is better to check and dissipate the inflammation which exists around them; without endeavoring to modify the nutrition of an hypertrophied heart or liver, diminish the quantity of blood that passes through them, and draw the irritative process outwardly, and act gently on the various emunctories of the body; and without ever dreaming of extirpating an organ like the uterus, when corroded with cancer, support the system

by mild food, and keep the surface of the ulcerated parts clean with anodyne washes.

Whatever be the disease that exists, soothe and mitigate pain; for this not only exhausts the frame, but inevitably aggravates the local mischief. While we pursue with prudence and modesty our sanatory labors, it sometimes happens that kind Nature crowns with unexpected success our submission to its mysterious decrees; in combating the auxiliaries, we will sometimes triumph over the principal enemy: in several cases the apparent cure of phthisics in our own practice has been the effect of a treatment purely lenitive, and in no manner specific; in truth chiefly of a mild regimen.

Much may unquestionably be often done by a judicious regimen: "*Abstinentia et quiete multi magni morbi curantur . . . . . optimum medicamentum et cibus opportune datus*," says Celsus; and Jos. Frank confirms the opinion of the Roman: "dietetic regimen constitutes at once the most certain and the most copious source of therapeutics. A great number of diseases are in truth to be cured much more surely by the judicious selection of food and drink, by change of residence, amusement of the mind, &c. than by all our arsenal of medicines;" and how substantially true are these few words of the great English physician, Sydenham; "It has often occurred to me that in the treatment of diseases we go on too fast, and that we should leave much more to be done by nature."—*Gazette Medicale de Stasbourg, No.* 1.

Nitrate of Potass in Acute Rheumatism.—Dr. Brocklesby seems to have been the first to point out the curative efficacy of saltpetre in the treatment of acute articular rheumatism. In his economical and medical observations, published in 1764, he has explained the practice which he found to be most useful. After taking a free bleeding from the arm, when the patient is young and robust, he orders a very copious allowance of warm gruel, in which from one to two drachms of the salt have been dissolved; the patient is to take large draughts of this drink at short intervals. He has given as much as from six to ten drachms of the nitrate, dissolved in from three to six quarts of the gruel, during the course of 24 hours. This mode of treatment rarely fails in producing a great relief of all the symptoms in two or three days; and very often a complete cure of the disease is effected, without having recourse to any other mode of treatment, within a week from commencing the treatment. The nitred diluent usually causes very profuse perspiration, and generally also acts upon the bowels; if it does not, an aperient enema should be given occasionally.

It is to be observed that Dr. Brocklesby's remarks are drawn from practice in military hospitals, where the patients are usually robust and healthy.

In 1772, Dr. Macbride, in his introduction to the theory and practice of medicine, recommended the same mode of treatment. Two years later Dr. Wm. White (Observations on the use of Antimonial Preparations) makes the following remarks on the effects of large doses of saltpetre:

"The employment of this salt, after bloodletting, is very useful in the treatment of acute rheumatism; but it must be given to the extent of an ounce in the 24 hours, if the vascular irritation be considerable; small

doses are of little service. In many cases of chronic rheumatism also, it is of great efficacy. Administered in the dose of from one ounce to an ounce and a half in 24 hours, it often cures the most severe cases of the disease, which may have resisted every other mode of treatment."

The use of the nitrate, notwithstanding such decided recommendations, fell into neglect, and although noticed by M. Bosquillon in his translation of Cullen, was not till 1832 when it was again brought to notice by M. Gendrin. One of his *internes* at the Beaujon Hospital, M. Aran, has brought together the reports of a dozen of cases treated with the nitrate of potash in full doses, dissolved in copious draughts of a mild demulcent diluent, very nearly according to the directions of Dr. Brocklesby. The dose of the salt varied from four to eight or ten drachms in the course of the 24 hours. The average duration of the treatment seems to have been about a week. In many of the cases there were well marked symptoms indicating disease of the heart: these symptoms usually subsided with the suffering in the joints.

The *modus operandi* of the remedy was usually as a powerful diuretic and diaphoretic: occasionally too it acted on the bowels.—*Journal des Connoissances Medico-Chirurgicales.*

Teeth of the first Dentition.—The following judicious remarks, on the preservation of the first teeth, are taken from the Baltimore Guardian of Health:

"The opinion that the preservation of the teeth of the first dentition is unimportant, inasmuch as they are soon removed by the operation of nature, and are then succeeded by those of the second—a larger, stronger, and withal more numerous set—is not only erroneous, but is fraught with danger to the health of both. "Dr. Harris, in treating upon the importance of the preservation of the first teeth, to the health and durability of the second, says: 'It is very important, that the deciduous teeth should be preserved until they are removed by the absorption of their fangs; because, in their health is involved the durability and health of the permanent teeth.' "When the first teeth continue healthy, until by the destruction of their roots, they are removed to give place to the second, these latter are generally well arranged, of a hard and firm texture, and, in consequence, less liable to disease than when developed in the midst of unhealthy parts, as they usually are when the former are allowed to decay, for it is to this, that the morbid affections which are so often met with during early childhood, in their sockets and surrounding gums, are in the majority of cases attributable. The teeth of the second set are formed behind and beneath those of the first, and any unhealthy condition of these latter or their contiguous parts, proportionate to its nature and extent, disturbs the process of the formation of the former. The earthy material that enters into their composition, is caused to be by it less."

Diagnostic of Pregnancy with three Children.—Dr. Bell Fletcher, Physician to the General Dispensary, Birmingham, has communicated in the *Lancet*, (September 11th, 1841,) the following very interesting case.

Mary Coleman, aged 30, presented herself as a patient at the General Dispensary of Birmingham on the 31st of July, 1840. Her tongue was

foul, and bowels inactive; the abdomen was extremely large, and the thighs and legs very œdematous. She had supposed herself pregnant, but is now so large and her legs are so much swelled, that she thinks herself dropsical. Menstruation has ceased for some months.

On examination of the abdomen, the uterus was found extraordinarily enlarged. On applying the stethescope, the sound called "bruit placentairé" was heard in the usual position, and the pulsations of three distinct fætal hearts in the following situations:—Six inches to the right of the naval, and on a line drawn across the abdomen two inches below it, a fætal heart was heard beating distinctly; on the left side of the naval about six inches, and on the same traverse line was heard another fætal heart equally as distinct as the former; and about four inches above the naval on the median line, was heard another pulsation of a fætal heart, but much less distinct that the other two. These pulsations, although corresponding with each other in frequency, were quite distinct, for on ascultating around each, the sound of the one was completely lost before the other was distinguished; the two former became inaudible about three inches from the points indicated; the last spoken of was scarcely audible at an inch distant from the point mentioned; it was very faint, but I felt convinced that it was independent of either of the others, and stated to her and others that I believed that her womb contained 3 children. On the 27th of September, 1840, she brought forth three little girls, who are alive and fine healthy children at this time.—*N. Y. Med. Gaz. No.* 3.

Hæmorrhage after Lithotomy stopped by Creosote. Dy Dr. Daser. —In a case of lithotomy it was found impossible to arrest the hæmorrhage by any of the usual means, and no particular vessel could be discovered from which the blood might flow. The patient was at last reduced to the lowest ebb from the continued loss, and had already lost consciousness, when a sponge dipped in pure creosote was introduced into the wound, and pressed against the bleeding parts for an instant or two. The hæmorrhage was immediately arrested. No particular pain was experienced, no unpleasant symptoms followed: thin eschars were thrown off, and the patient recovered.—*Med. Examiner from Ed. Med. and Surg. Journ., from Journ. fur Chir. und Aug.*, 1840.

On the Repeated Application of one or two Leeches to the Knee in Dysmenorrhæ. By M. Trousseau.—In three hospital patients under the care of M. Trousseau, the catamenia have followed the application of a leech to the internal surface of the knee. In one case a leech was applied to the right knee; while it held on the patient experienced nothing particular, but as soon as it fell off pains in the loins came on, which lasted almost an hour, and the discharge then appeared. The next day it was arrested again, and a leech was applied to the left knee; and the discharge appeared as before, and continued as usual during three days. In another case the pains of uterine congestion commenced with the application of the leech, which adhered during an hour. The effect produced by one leech is not wonderful, says M. Trousseau, because if the bleeding is allowed to continue as large a quantity of blood flows as the ordinary amount of menstrual discharge.—*Bos. Med. & Sur. Jour. from British and Foreign Med. Review, from Bull. Gen. de Therapeautique.*

Connection between abundance of Food and Mortality. By M. Melier.—In this memoir, which was read at the Academy of Medicine of Paris on the 7th of September, the author established, by numerous documents drawn from the histories of various countries, that the number of deaths always correspond to the price of food. "Wherever there's a loaf added, there's a man born," said an economist: and nothing is more true than this metrophorical expression. If we represent the variations of the general mortality and those of the price of bread at different times, by two curved lines which rise and fall with the fluctuations of these particulars, we shall find all their curvatures exactly, and with the most perfect regularity, corresponding. The constant increase of the population of France for a certain number of years, is easily explained by the progress of agriculture, the modifications which the laws relating to corn have undergone, and especially by the introduction of potatoes. The influence of the dearness of food, however, is observed more distinctly in the year next following, than in any in which it has occurred.—*London Medical Gazette, from Gazette Med., September* 10, 1841.—*From Medical Examiner.*

Crooked Noses Straightened. By Prof. Dieffenbach.—A slight degree of divergence from the perpendicular is common enough in the nose; and any considerable departure from the straight line gives a very absurd and repulsive expression to the countenance. Two cases of this kind presented themselves in young people about twenty years of age, almost at the same time. In the one the deformity had been produced by a fall, in the other it was congenital. In the one the nose was bent to the right, in the other to the left; the extremity in the former case pointed to the right cheek, in the latter to the left, the nostrils were situated, not side by side, but one over the other. With a delicate curved knife, Dieffenbach transfixed the side of the dorsum of the nose, at the point of junction between the bone and the cartilage, and separated the two along the line of union, dividing the cartilarge under the skin. The knife was then withdrawn and passed on to the other side of the dorsum nasi, so as to separate the other ala, and at the same time divide the septum narium.—The nose now almost of itself, assumed its natural direction. By means of plugs of lint placed within the nostrils, and a couple of strips of sticking plaster, it was readily brought into, and maintained in the perpendicular. The success of the operation was complete in both cases. The traces of it can scarcely be known.

Neither inflammatory swelling nor suppuration occurred. The cure was perfect within a very few days.—*London and Edinburgh Monthly Jour. Med. Sci., November*, 1841, *from Casper's Wochenschrift, Sept.* 18, 1841.—*New York Medical Gazette.*

Parturition without Consciousness Thereof.—In the Lancet for Nov. 27, Mr. T. E. Rawson gives a case, the chief points of which we will briefly detail. He was called in haste to a young female in labor with her first child. The waters broke before his arrival, and he was assured by the patient without pain—he made a vaginal examination, found the os uteri fully dilated and the head steadily advancing, still the wo-

man complained of no pain, finally the child was expelled, and at that moment Mr. R. watched the countenance of the mother, (she cannot be called patient) it did not betray the slightest sign of suffering—she only expressed great surprise on seeing the child. She was a short plethoric woman *in good health.* There was no reason for her attempting to conceal the pain she felt, she was married and had engaged Mr. R. some months before.

Remarks.—The case is exceedingly important in a medico-legal point of view, bearing on the question whether a woman could be delivered without being conscious of it. Authors have generally taken the negative side of this question. Montgomery is decidedly against the probability except "in extraordinary cases." Now Mr. R's case would prove that parturition may take place almost if not entirely without pain, and that, in a first labor. From what has come under our own notice we are inclined to favor this idea. It is beyond doubt, true, that in some cases the suffering is almost nothing; of this we have had a confession from a very intelligent female. Now if labor can be effected with so little pain, it is obvious that it might take place during a deep sleep, without the woman being awakened by it,—this indeed has happened.—*Ibid.*

Statistics of Mortality by Consumption.—By the last annual report from the health office of Boston, we learn that 1919 individuals have died the past year, that 256 of the deaths were from consumption, and that 229 were from other diseases of the respiratory organs. Computing the present number of inhabitants at 85,000, then 5.7 in 1000 living, die annually from diseases of the respiratory organs, and 3.3 in 1000 living, die of consumption, giving Boston a decided advantage over England in this respect. In the Medico-Chirurgical Review for 1841, we have a review of the Annual Report of the *Registrar-General*, of births, marriages, and deaths in England, for a year or two previous—and it appears that in every 1000 living, 6 die annually in England from diseases of the respiratory organs; and 4 in every hundred living, die of consumption. 18 per cent., or 16 per cent. of the deaths of males and 19.2 of females, is caused by consumption. 31,090 English women die in one year of this incurable malady. The consumption there destroys the greatest number in spring, but the excess of deaths may have been the result of the previous winter's cold. Males suffer more from the disease in winter, than females. T.

[*Boston Med. and Surg. Jour.*

Statistics of the Lateral Operation of Lithotomy at Naples. By M. de Renzi.—From the year 1821 to 1828, inclusive, 596 cases of stone were operated on, 579 of whom were males, and only 17 females. Of this number 503 recovered, and 91 died; 306 of the cases occurred in persons under fifteen years of age; 231 in adults, and 59 in aged individuals As a means of comparing the mortality from this operation, the results of the operations of lithotomy for the year 1839 are given. During this year 47 were operated on, 46 of whom were men, and 1 woman. Of these 38 recovered, and 9 died. Of this number 15 were

below 15 years of age; 31 were adults, and 1 was aged.—*Med. Examiner, from Ed. Med. and Surg. Journ., from Il Filiatre Sebezio Giornale.*

Pain in the Tibia removed by Incision. By John Jones.—The interesting case of severe pain in the tibia relieved by incision, narrated by Mr. Freeman, in your last No., induces me to bear testimony to the success of his plan of treatment in an exactly similar case that occurred in my own practice sixteen or seventeen years since.

A strong, hale, farmer, about fifty years of age, living on the borders of the forest of Exmoor, was attacked with a most severe and excruciating pain in the lower part of the tibia. He sought relief from the nearest medical man in the neighborhood, who bled him topically and generally, applied blisters, rubefacients, fomentations, &c. &c., but all without the least alleviation of pain. When I first saw him, the disease had existed above a fortnight, and the sufferer was evidently sinking from excessive pain. There were no appearances of inflammation, nor had any previously been discoverable; indeed, had a perfectly normal appearance. I immediately made three free incisions, so as to divide the periosteum, in a line with the tendon of the tibialis anticus.—A common poultice was applied, and entire cessation of pain was experienced in the course of a few hours. The patient got rapidly well, and is, I believe still living in perfect health.—*Bost. Med. and Surgical Journal, from London Lancet.*

Enormous Collection of Milk in the Breast.—The following case occurred under the observation of Professor Parker, of New York, and is entitled to the particular attention of medical men:

This patient is about thirty, apparently in good health, has always worked hard, now has an infant nine months old, which she has nursed regularly from both breasts; the right is enlarged immensely. The patient states that the breast began to increase in size in July last, that it has gone on steadily augmenting, but without pain or febrile symptoms. The tumor is not now painful, but causes considerable inconvenience by its size. The nipple is natural, so is the skin, the blood-vessels of the breast are somewhat enlarged. On looking at this case our first idea would be, that we had hyperthrophy of the breast, or else a tumor situated behind the gland pushing it forward, but on examing carefully we find distinct fluctuation: the swelling is not therefore solid but fluid—what then is the probable nature of that fluid? We have no reason to think that it is pus, having no evidence that the inflammation essential to the formation of pus, has at any time existed. The tumor may be from hydatids or from a collection of milk distending an obstructed lactiferous tube, though its very large size renders the latter supposition improbable.

As the case is obscure, I shall first perform an exploration, and push in a sharp pointed bistoury. (This was done and milk escaped, the true character of the tumor being now evident, a trocar was pushed in and milk gushed forth in a free stream, it was perfectly sweet and apparently quite unchanged, being measured after Lecture, was found to be

three full quarts, this milk as we were afterwards informed, being allowed to stand for 24 hours, gave a good quantity of cream.) The nature of this case is now evident enough; it is a very remarkable one, I have never seen a tumor of this character approach the size of the one we have here, they are not generally larger than an orange.—Every now and then lacteal fistulæ result from the opening of these sacs, in that case milk will flow from the artificial opening every time the child nurses, and the only remedy is to wean him, the breast then ceasing to secrete milk, the opening will heal. I shall direct this woman to call on us on Monday, that we may see the progress of this exceedingly curious case.

Monday, January 10.

The Patient with lacteal tumor again appeared in the Theatre.—The opening made by the trocar had healed by the first intention, and the milk had again accumulated in the breast. The organ was pendulous and somewhat pediculated, its circumference was 22 inches; fluctuation more distinct at some points than at others, was evident all over the tumor. The trocar was again plunged in and about two quarts of pure sweet milk drawn off. The patient was advised to wean her child.

Medical Memoranda.—A new apparatus for amputation has been devised, which takes off a limb in ten seconds and is favorably spoken of by Dr. Mowen, of the United States Army, and other eminent Surgeons, who have seen it.——In an article in the *Med. Zeitung*, by Dr. Scholer, assistant Physician of the of Berlin Lying-in-Institution it appears that the immersion of children apparently still-born has been successful in two cases after all other means of re-animation had failed.——Lugol, claims to have demonstrated the vascularity of tubercles, he says: "when congestion or inflammation exists, their vascularity is often quite manifest; not only so, but their congestion may lead to rupture of the vessels, effusion of blood in the substance of the tubercle."——Mr. A. Thierry gives three cases of fracture, illustrating the dependence of the reparative process on the state of the general health. In one, a boy, thirteen years of age, sixty days elapsed without union and it was found to be owing to the physical solace to his *ennui* afforded him by the girl that nursed him; in another, a boy, fourteen years of age, the bone did not unite because of the practice of masturbation to which he was addicted; and in a third, sixty days elapsed without union because of the presence of venerial affection in the system.

A peculiar disease is represented to have attacked the dogs in the neighborhood of Fayetteville, N. C. The animals bitten, die, but hydrophobia is not produced.——Drs. John Delamaten, L.

Green, and J. R. Brown, are associated in the organization of a private Medical School, at the village of Little Falls, Herkimer county, N. Y.——In the Medical Institution of Yale College, the degree of Doctor in Medicine, was recently conferred on nineteen individuals.——Professor Osiander regards a too exclusive use of food, of articles composed of fecula, especially rye-bread, as contributing to produce a sort of fœtal hypertrophy; and he recommends to pregnant women, who are obliged to live on such a diet, to abstain at regular times from food, and to take occasionally a saline purgative. The excessive developement of the fœtus is one of the causes of difficult labor, and the Professor relates five cases of this nature.——Dr. Van Renssalaer of New York, speaking of the climate of Rome, in a letter to Prof. Silliman, says, for incipient diseases of the chest, it is admirable. These maladies are very rare amongst the natives, as may be learned from the fact, that at the general hospital, Santo Spirito, where there are 1,800 heads, besides 200 for accidents, and where all disorders are admitted, amounting to nearly 20,000 in the year, the number of patients with diseases of the chest and lungs, in 1840, was 117. ——Students of medicine, going from the West and South, to the Eastern cities, are advised by the Editor of the N. Y. Medical Gazette, to be at once vaccinated, or re-vaccinated as the case may be.——Some weeks since, at Leigh Linton, Worcestershire, Eng., five persons, who had eaten of greens, which had become putrid by being boiled when half frozen, and therefore poisonous, were taken ill. One man and two children died, and the other two with difficulty recovered.——The croup has been making such ravages amongst the children of Cherbourgs, Eng., and medical treatment has been found so ineffectual, that public prayers for the cessation of this scourge, were ordered in the churches for nine days.—— There is now in the work-house of the Limerick Union, a woman named Mary Scully, 106 years of age, in the possession of all her faculties. She says she has never tasted physic of any description.——It is stated in the N. Y. Medical Gazette, quoting from the Lancet of Nov., says, that a ball was lately given at the Lincoln Asylum, an institution for the insane, which went off in the best possible manner. "The company consisted of patients in every form and stage of insanity, the gay and the grave—the boisterous and the stupid, all mingled together. Among the invited guests were several ladies, who became in the course of the

evening, so completely satisfied of the safety of mingling with the madmen, as to accept partners from among the patients."—Such things are quite common, it is said, in the asylums at Worcester and Battleborough, in the United States, and we would ask, might they not be introduced into the Kentucky Asylum in this city?——A lady died at Newcastle, Delaware, a few days since, aged 109 years. She has had five husbands, but no children.——A mode of preventing the effluvium from the decomposition of dead bodies, has been suggested, by filling up the coffin with liquid plaster of paris, which of course, instantly becomes fixed and hard. The cost would be about 2s or 3s.——The Jefferson Medical College of Philadelphia, numbers the present session, 209 students.

TO CORRESPONDENTS.

Dr. Hyndman's request of us, for an article on *Leucorhoœ*, and another on *Gonorrhoœ*; that of Dr. Foster for one on *Diet*, and that of Dr. Holman for one on *Stools* and *Mercury*, shall he attended to, at as early a period as possible. We are pleased to learn that our friend and public pupil, E. W. Theobald, M. D. of Baltimore, is making reputation as a Surgeon. Recently he operated on two cases for Strabismus, and with entire success, having deferred informing us of the operations, until sufficient time had elapsed to satisfy him of the permanency of the cures. The communication of Dr. David Porter, on *Direct Sympathies*, has been received.—We should be glad to receive from his ample experience, communications more practical in their character. The Medico-legal investigation, an account of which was sent us a few days since, by Dr. Sutton, of Georgetown, Ky., is a striking illustration of the too frequently contradictory nature of medical testimony. This is a severe reflection, not only on medical, but legal gentlemen. It arises from ignorance or inattention on the part of the former and ignorance on that of the latter. In the case referred to, one of the points of dispute, was the importance and necessity of exploring all the cavities and organs of the body. This was affimed and denied, and yet it is one of those points, which every medical jurist considers settled. Nor can there be a doubt how it has been, or if it has not, how it should be settled. Lawyers look with confidence

for a verdict of acquittal, when they find that the medical witnesses have neglected any cavity or important organ of the body. They rely much on negative testimony, and when they discover that the medical witnesses have not prepared themselves by a medico-legal dissection to refute it, they at once, and with confidence, allege that the deceased came to his death by a natural cause, existing in parts that were not examined. This may not be probable, but it is possible, and as the medical witnesses have, by their neglect and inattention, put it out of their power to disprove it, a doubt is created as to the cause of death, and this is often sufficient to save the prisoner, which possibly happened in the case referred to by Dr. Sutton. A case occurred recently in England, which illustrates the inportance of a thorough dissection in all cases in which there is the slightest doubt, as to the cause of death. Taylor in his Medical Jurisprudence says:

Three men were tried on a charge of manslaughter: the evidence brought against them was as follows. The prisoners and the deceased had been drinking together at a public house, when a quarrel arose, which ended in a battle between the deceased and one of the prisoners. The other two acted as seconds. The fight had continued for some time, when the deceased was knocked down by a severe blow on the head and did not speak afterwards. A surgeon was sent for, but before his arrival the deceased had expired. On the trial this witness stated, that he found a considerable bruise behind the ear in the region of the mastoid process, accompanied by the extravasation of blood. On being cross-examined, he admitted that he did not open the cranium, the coroner having told him that it was unnecessary. He ascribed the death of the deceased to a pressure of blood on the brain, which, in his opinion, might have become extravasated from a blow or fall, or from extraordinary excitement. The deceased was of an apoplectic diathesis. The learned judge observed to the jury in summing up, that the medical evidence was not sufficient to determine whether the deceased had died from the voilence employed by the prisoner, or from natural causes. An acquittal instantly followed!

In the case referred to, Dr. Sutton, is of opinion that too much importance was "attached to the condition of the right lung," by himself, as well as by others. There was much difference of opinion in regard to the exact state of the right lung, at the time of death; by some it was said to be hepatized —by others congested, and by all, that its appearance in the absence of the evidence of external violence, was sufficient to account for death. This contrariety in the medical testimony was of itself, sufficient to cause a failure of the prosecution, and should teach medical jurists the importance of resorting to such precau-

tions, as are calculated to prevent its occurrence in future. At a medico-legal dissection, there should, if possible, be several present —all should examine the parts attentively as they are exhibited, and then a statement of the case should be drawn up, which all should sign. This would prevent the comfliction that is too often seen, when medical men are examined in court, and which is any thing but reputable to those that depose, or promotive of the cause of justice.

A trial took place in the West of England not very long since, in which a woman was indicted for inflicting a wound on the throat, which caused the death of the deceased. The chief medical witness stated in his evidence that it was the neck which was wounded and not the throat, upon which very absurd distinction in the specification of the wounded part, an objection was taken by the prisoner's counsel, on the ground that the wound had been mis-described in the indictment. This objection was speedily over-ruled by the court, but the prisoner was afterwards acquitted from the conflicting evidence given respecting the parts implicated in the wound. One witness deposed that the carotid artery on one side of the neck was divided, while another declared that that vessel was untouched! On an inquest which lately took place, two surgeons referred the death of a man who had been severely beaten by certain parties, to the effects of drinking, stating that there was merely a cut on the deceased's nose, which could have no connection whatever with his death. Two others, one of whom had made a post-mortem inspection of the body, deposed that they found the maxillary and nasal bones most extensively fractured. On opening the head, they found traces of inflammation of the brain to which they attributed the death of the deceased. In consequence of this conflicting evidence, a verdict of "died by the visitation of God" was returned.

The above points are noticed, because we are satisfied they are too much neglected, and we have preferred briefly to illustrate and enforce their importance, than to give the case of Dr. Sutton in detail, which although accurately drawn up, would not, perhaps, be agreeable to some of the parties concerned.

Necrology.—Died, at London, on the 2d December, aged sixty-five years, Dr. Birkbeck, founder of the Mechanics' Institutions for for gratuitous lectures. At London, on the 4th December, Dr. Daniel D. Davis, aged sixty nine years, lately professor of obstetric medicine in University College, London, and author of many standard medical works; Dr. D. was physician-accoucheur to the Duchess of Kent, at the birth of Queen Victoria.

Med. Examiner.

THE

WESTERN AND SOUTHERN MEDICAL RECORDER.

EDITED BY JAMES CONQUEST CROSS, M. D.

Professor of the Institutes of Medicine and Medical Jurisprudence in Transylvania University, and late Professor of Materia Medica and Therapeutics in the Medical College of Ohio.

No. 6. LEXINGTON, KY. APRIL, 1842. Vol. 1.

THOUGHTS ON INTERSTITIAL ABSORPTION.

BY THE EDITOR.

This article is intended merely as an introduction to the study of the source of bile, and the purposes it is designed to subserve in the animal economy, which, it is trusted, will lay the foundation of a more philosophical view of the import of stools in disease, and of the use of calomel. In the Materia Medica there is no article, properly employed, that is capable of doing so much good, nor is there one, that in injudicious hands, is productive of so many deplorable evils, and we are satisfied that much of the discrepancy of opinion existing amongst writers, in regard to its value, is owing to their misapprehension of the exact objects it is capable of accomplishing, and, of course, of the circumstances which demand its employment. When given indiscriminately, as it too often has been, it has caused incalculable mischief, and when persevered in, for weeks and months, without a definite end or object in view, it very generally exasperates the very state of things it was intended to remedy. These remarks are made as an apology for the physiological and pathological subjects we shall be obliged to discuss before we can enter upon the consideration of calomel.

By *interstitial* is meant that kind of absorption which goes on in the substance of the different textures of the body, and although this is the term by which it is popularly designated, it has received

other denominations, such as decomposition and fluidification, in contra-distinction to decomposition and solidification. By this kind of absorption, therefore, it is supposed that a change is produced in the matters of which the textures and organs are composed, —by it the materials which, by use, have become unfit for the purposes to be answered by the different structures are removed, in order to make room for the deposition of new particles from the blood. When this change has reached every structure the body is said to be renovated. It is true, however, that the animal economy is constantly undergoing a change in the matters of which it is composed. When we reflect that the blood is, at regular intervals, receiving supplies through the thoracic duct, and that its volume does not increase, we must conclude, that it is, in a given time, losing through nutrition and secretion, an amount equivalent to that which is poured into the left subclavian vein. That as a great part of the blood thus lost, is deposited in the various organized structures, and that after the body has reached a certain determinate volume, characteristic of every species of animal, it experiences no further developement, we must conclude that they must in some way, part with an amount of matter just equal to what they receive from the blood. This is effected through the agency of interstitial absorption, and thus, an equilibrium is kept up between the antagonizing processes of nutrition and absorption. This reasoning is not only intelligible, but it appears to us, that it should be satisfactory. Facts, to any extent, might be adduced to prove the existence of this kind of absorption, if it were needful—a few, however, may not be out of place. When the equilibrium, which, in health, subsists between nutrition and absorption, is broken up by the atrophy of the organs of the former, there is general emaciation, and the following is the order, in which the tissues are absorbed: Fat, celullar tissue, muscle, bone, cartilage and tendon.

We see examples of this kind of absorption in the atrophy of the tail of the tad-pole—in the removal of the pupillary membrane in the fœtus—in the absorption of the thymus gland—in that of the mammæ in the decline of life—in the rapid reduction of the volume of the uterus after delivery—in the developement of the cellular structure of the bones in the child, long after they are formed—in the callus, which is solid at first, becoming hollow, like the other bones—in the disappearance of the diploæ of

of the cranial bones in old age—in the gradual augmentation of the cranium in infancy to accommodate it to the progressively increasing volume of the brain, which can only be effected by the removal of the old and the deposition of new osseus matter.

The time requisite to accomplish a complete renovation of the body has been variously estimated;—by the ancients seven, and by Bernouilli, three years were thought sufficient. This, however, is mere conjecture, for there are those, who, considering the permanency of the marks made by the art of *tattooing*, think a much longer time requisite and even seem inclined to deny that it takes place at all. But this is certainly a gratuitous idea, for the coloring matter, by which those indelible marks are made, is mechanically introduced into the interstices of the cutis vera, and is not incorporated with the structure of that tissue, and therefore, there is no more reason why the interstitial absorbents should act upon it, than that the lacteals should act indiscriminately on the contents of the small bowels. The former have as special an office to perform as the latter, and therefore, there is not, and there cannot be, any relation between their vital properties and any foreign substance.

What are the agents of interstitial absorption? To the vessels, called lymphatic, this function is commonly ascribed, but this, to say the least, is a doubtful position. This hypothesis took its origin in the researches of Hunter, which seemed to render it probable, that lymphatics are the only vessels in the economy that are capable of absorption. Since his time, however, the fact has been fully established, that the veins or vessels that originate in all parts of the body where veins are found, and which terminate in capillary veins, perform this office in common with the lymphatics. The following facts, are sufficient for this purpose. Substances introduced into the stomach find their way into the circulation and may be detected in the urine after the great lymphatic trunks are tied. Substances that may be recognised by their smell, or detected by their appropriate tests, have been found, after being introduced into the stomach, in much more abundance in the mesenteric veins and vena portarum, than in the thoracic duct.—A poison introduced into a part having no connexion with the body, except through an artery and a vein, will produce its characteristic effects, and nearly in the same time, as when it is con-

nected with it by nerves, lymphatics and blood-vessels. A poison introduced into a portion of intestine between two ligatures, will produce no injurious effect, so long as the artery going to, and the vein coming from that part are obstructed by a ligature, or when the blood is allowed to escape from the vein through an opening in it, even though the lacteals and other textures remain uninjured, but will produce its effects as soon as the circulation is set free, and the venous blood is allowed to return to the heart.—Saline substances injected into the bronchial tubes, pass quickly into the blood although the thoracic duct be tied, and are detected sooner in the left side of the heart than in the right.—If two saline solutions are placed in contact with the internal and external membrane of a portion of intestine that is isolated, they will be found united in the veins which return the blood from that part.

These facts do not appear to find so ready an explanation, as in the opinion that ascribes absorption to other vessels than those that are denominated lymphatics. While the establishment of this point renders a difference of opinion admissable, it is proper to enquire if there are any reasons to authorize the physiologist in ascribing interstitial absorption to one class of vessels, rather than to another? The claims of the lymphatics to the performance of this function are not only questionable, but obviously untenable. Thus, in many parts in which the existence of lymphatics has never been found,—for example, in the bones,—there is marked evidence of interstitial absorption going on. In those parts in which they do exist, it is difficult to believe that they are the agents which take up many things that are removed from those parts,—such as the coloring principle of bile, some of the component parts of urine, fat, purulent matter, which are rarely, if ever, found in the lymphatics, while their presence has often been recognized in the venous circulation. By physiologists, it is said, that the fluid contained in the lymphatics, presents a nearly perfect uniformity of character. This would be impossible if the lymphatics are the agents of interstitial absorption; for then it would be admixed, necessarily, with substances very various in nature, and which would impart to it considerable diversity of character, causing it to be at one time different from what it would be at another.

That the lymphatics absorb is unquestionable, but there is no satisfactory proof that they absorb whatever is presented to them, without discrimination. That poisons, when introduced into a part,

will produce their deleterious effects when its lymphatics are obstructed, but the circulation in the veins which return the blood from it to the heart is free, has been already proved, while it has appeared equally clear that when the latter are tied, but the former free, no effect is produced. Such facts, doubtless, render it probable, that articles calculated to derange the functions of the animal economy, are not introduced into it through the lymphatics, but through some other channel, the repugnance of which for foreign and unassimilated substances, is not so great. But it is urged, that the lymphatics and glands, leading from an ulcer, swell and inflame in consequence of the absorption of a virus. This, we admit, occasionally happens, but it is by no means, a general fact, It much more frequently happens, that lymphatics and glands in the circumstances, just supposed, do not exhibit the pathological phenomena just mentioned. Indeed, it is rare to see ulcers in the leg, connected with inflamed glands. Nor is it uncommon to see secondary symptoms result from a chancre without any previous affection of the lymphatics, and therefore, when they do become inflamed, it must be regarded as a merely accidental circumstance, an indirect fact, which cannot be received as proof that deleterious substances are carried, by the lymphatics, into the economy, until it is satisfactorily established, according to the allegation of Hunter, that they are the only vessels in the body that absorb.

In an article published twelve years ago, in the *Transylvania Journal of Medicine*, we endeavored to show that the lymphatics have an office to perform, directly the opposite of that of interstitial absorption. We rendered it almost certain that they are important agents in the process of nutritive assimilation, instead of being sewers, through which the old and refuse matter is expelled from the system. From the experiments of Tiedemann and Gmelin, as well as those of many other physiologists, it appears that the lacteals are precisely those vessels that most rarely perform the office of accidental absorption. It seems that the vital properties by which their absorbant action is regulated are particularly averse to the admission of any other substance, than the chyme itself. This they absorb readily, but refuse obstinately every thing else. Saline and odorous substances have often been exposed to their action in the bowels, and every one knows that it is very rare for them to pass into the lacteals, while they are often, and very soon detected, in the mesenteric veins. These

facts render it quite certain, that the chyme in the bowels, which is designed to supply the losses that the blood is hourly experiencing, nature did not intend should be deteriorated by admixture with other matters. To preserve the chyme in a pure state, must be a matter of importance. For this, abundant provision is made in the peculiar vital properties, with which the lacteals are endowed.

If what we have said, be true, and it appears, to us, that no reflecting physiologist can doubt it, where is the necessity, we ask, for the great precautions that are taken at the mouths of the lacteals to prevent the admixture of chyle with improper substances, when long before it reaches the circulation it is adulterated by being incorporated with the old and refuse matter, carried into the thoracic duct by the lymphatics of the system at large?

The matters taken up by the interstitial absorbents are doubtless removed because of their unfitness to remain any longer, consistently with the proper discharge of the functions, in the textures of the body. They are no longer able to nourish the system—they are inadequate to the maintenance of vital action, and in these respects, are completely unlike the fluid called lymph, and which circulates in the lymphatics. This, is regarded, by all physiologists, as a very highly assimilated, and an eminently nutritive fluid, and this character is wholly incompatible with its supposed source. In view, therefore, of the nature of lymph, it is impossible to suppose that it is derived from the *debris* of the solids of the body.

The hypothesis, moreover, which considers the lymphatics as the agents of interstitial absorption assigns unwittingly to the thoracic duct two offices, that are not only distinct, but diametrically opposed to each other. It makes of it an excretory, as well as an incretory duct—it carries into the system the nourishing fluid, and out of it the effete matter. This idea, is not only without any analogy in living bodies, but it is entirely inconceivable. Fluids, which should be kept the most completely separate, are thus the most intimately mixed and confounded.

These considerations render it almost certain, that the lymphatics, properly so called, cannot be regarded as the agents of interstitial absorption, and that this office is performed by capillary veins or absorbent vessels, which terminate in them. The varied character of venous blood, as compared with the nearly uniform

character of lymph, gives decided support to this idea. The vessels assigned to the office of interstitial absorption must necessarily, in the performance of it, take up matters often varied in character, which should be detected in the fluid which they contribute to form, whether it be blood or lymph. Now in the former, as it exists in the veins, particles of fat,—sanious matter,—odorous and saline substances, together with many other things that could have reached there, through absorption only, have often been found in the blood, while their admixture with the lymph has rarely, if ever been seen.

Inasmuch, as the supposition that the effete and refuse matter passes into the veins instead of into the lymphatics, has been rendered very probable, the determination of the special agents of this absorption, is a point comparatively unimportant. It is proper, however, to state, that it has been ascertained by the observations of Abernethy, Bracy. Clark, Tiedemann, Fohman, Lauth, Lippi, Portal, and others, that in man, and others of the mammalia, vessels which have the characters of absorbents, and pass through glands, very frequently terminate in the veins in their vicinity. The number of these terminations is much greater, we have reason to suppose, than those that have been demonstrated, and the fact of their existence, is sufficient to give plausibility to the supposition, that the foreign substances found in the veins, are not introduced into them by what is called venous absorption, but by absorbent vessels that terminate in veins.

The effete matter is carried into the capillary blood-vessels, and in these vessels the blood undergoes a remarkable change; it is converted from arterial into venous—precisely the reverse of the change produced in the blood during its passage through the lungs. Is there any connexion between the introduction of theold and refuse matter of the tissues into the blood and the change just adverted to? This question will be more satisfactorily answered after we have learned the cause of the conversion of venous into arterial blood, in the lungs. Air, during respiration, is chemically changed. The oxygen which forms about 20 per cent of its constitution is diminished and the carbonic acid, which forms less than 1 per cent. of it, is increased, and it was for a long time believed that the amount of oxygen consumed, was just equivalent to the quantity of carbonic acid produced. Then, it was believed, that the disappearance of oxygen was satisfactorily explained by its supposed com-

bination with the carbon of the venous blood and consequent increase of carbonic acid.

It was soon ascertained, however, that the volume of oxygen consumed in respiration is greater than the amount of carbonic acid produced, and this point has been finally and completely settled by the experiments of Edwards and Dulong. Long before this point was satisfactorily settled, but after good reasons had been adduced, to show that it would be ultimately proved that there is a disproportion between the volume of oxygen consumed, and that of carbonic acid produced, Davy and Gay Lussac, suggested as a means of accounting for the surplus portion of oxygen not employed in forming carbonic acid, that it united with the hydrogen of venous blood to form pulmonary perspiration. It should have been recollected, however, before the adoption of this hypothesis, that an union between these gases never takes place except through the intervention of electricity, or of a body in a state of ignition, and that, whenever it happens, there is light emitted and and heat evolved. These conditions do not obtain in the lungs. Moreover, this hypothesis renders the presence of oxygen necessary to the production of pulmonary perspiration, as well as to explain the increase of carbonic acid in the air that has been respired. Such, however, does not appear to be the language of direct and positive experiment. Long ago we were taught to suspect, from the experiments of the Abbe Spallanzani, that carbonic acid is produced though animals be made to respire pure azotic or hydrogen gas. By M M. Coutanceau and Nysten, this result was confirmed. They ascertained that when five dogs were obliged to breathe pure azotic gas nearly as much carbonic acid was produced, as when common atmospheric air had been used. It having been alleged that the carbonic acid which is expelled from the lungs, while animals are obliged to breathe azotic or hydrogen gas, was formed in the lungs prior to the commencement of the experiments, to obviate this objection, they caused the lungs to be exhausted as completely as possible, before their exposure to the gases above mentioned, but this produced no variation in the result. We should say that in the experiments of Spallanzani, Coutanceau and Nysten, pulmonary perspiration was produced almost as abundantly as when common air is breathed, and that the results obtained by those individuals, have been fully confirmed by the experiments of Dr. Edwards. He confined frogs in pure hydrogen gas, in which

they can live, a considerable length of time, and it was ascertained that both carbonic acid and pulmonary perspiration were produced in such quantities, as to prove that they could not have been derived from the residual gas in the lungs, for, in some instances, they were nearly equal in volume to the bulk of the animals on which the experiments were performed.

From this examination, it appears to be conclusively ascertained, that the oxygen, which disappears in respiration, cannot be accounted for by the increase of carbonic acid in the air breathed,—that no chemical union between oxygen and carbon takes place in the lungs, and that, therefore, no other explanation appears so satisfactory, as that which ascribes the loss of oxygen to its absorption by the blood, and the increase of carbonic acid in the air, to its exhalation from the blood. To this two-fold operation, are we indebted for the change which the blood experiences in passing through the lungs. This view of the subject receives great support from the fact, that oxygen exists in arterial, and carbonic acid in venous blood. That oxygen exists in greater quantity in the former than in the latter, has been fully proved by the experiments of Mancet and Macaire. It appears from the careful experiments, made by Tiedemann, Gmelin, and Misterlich, and by Stromeyer, that carbonic acid exists in greater quantity in venous blood, than in arterial, because when both kinds of blood are admitted over mercury, into vessels containing a small quantity of acetous acid, and the air surrounding the mercury exhausted, the venous blood gives off a larger quantity of gas than the arterial. And the absence of any appearance of carbonic acid, on the application of the air-pump, in the same manner, to pure blood over mercury, (which was observed by them, as well asby Dr. Davy and others,) does not prove that carbonic acid may not exist in it, even in an uncombined state, since it has been found by Hoffman, and by Williams, that blood, artificially saturated with carbonic acid, is not made to part with it merely by the action of the air-pump, although it will do so on subsequent agitation with different gases. These considerations, while they prove that carbonic acid exists, already formed in the venous blood, and that, too, in considerable quantity, should convince us, that it it is not necessary, expedient, or proper, to resort to the untenable supposition, that the carbon of the venous blood is dislodged from it in the lungs, by its union with the oxygen of the air. Thus, we say carbonic

acid is exhaled and oxygen is absorbed by the lungs, and that it is by parting with the former and the addition to it of the latter, that the blood is arterialized in passing through the respiratory apparatus.

This change is effected in the local or pulmonary capillary system, but there is another change, equally remarkable, which takes plaoe in the general or systemic capillary system. To what is the latter owing? As the exhalation of carbonic acid, and the absorption of oxygen causes the blood to change from black to red in the lungs, we would infer that the loss of oxygen and the gain of carbonic acid, causes the blood to change from red to black, in the general capillary system. Indeed, if the causes assigned for the former change be correct, those to which the latter is ascribed, must of necessity be so also. There is more oxygen in arterial than in venous blood, and more carbonic acid in the latter, than in the former. Now it appears to us perfectly reasonable to suppose, that the disappearance of the oxygen from arterial blood, and the increase of carbonic acid in venous, is owing to the former combining, in the general capillary system, with the carbon derived from the tissues by the interstitial absorbents, and which is conducted by them into the veins. Thus combined the escape of the carbon from the lungs, which is absolutely necessary to enable the blood to become arterial, is effected more readily, and with greater facility. That the change in the color of the blood which takes place during its passage through the capillaries, is owing to some thing received by it from the tissues, is rendered probable by the fact that, when from any cause the momentum of the blood in them is much increased, its color is but little altered. In venesection, the first blood that escapes from a vein is black, but it soon becomes of as light a red color as that of the arteries, which circumstance can only be explained by referring it to the rapidity with which it circulates through the capillaries after a vein is opened. In the first period of inflammation, the circulation is very much accellerated and then the blood passes from the arteries into the veins much less changed than usual. Although it is probable, the same amount of effete matter passes into the capillaries, in a given time, when the blood moves rapidly, as when it moves slowly, it is evident that when the latter is accellerated, the former will be diffused through a larger amount of blood than usual, and that if its change of color be owing to admixture with effete matter, this must be much less obvious than when the blood is moving with its usual momentum.

Previous to the taking up of the effete matter of the body by the interstitial absorbents, it is agreed that the particles occupying the meshes of the capillary vessels must be dissolved—must be reduced to a fluid state. In this process, their organization is destroyed—their vitality extinguished, and they are reduced to a state that favors putrefaction; during which we know that oxygen is absorbed from the air, and carbonic acid is formed. Now, we have in those parts of the economy, where the fluids and solids are the most intimately mixed, the conditions that are necessary to this result. The refuse matter is removed because of its unfitness to remain in the organism—it is no longer the residence of vitality, and consequently, must yield to the force of physical laws. Oxygen abounds in arterial blood, but, in a great degree, it disappears in the general capillary system, where it is sent for the purpose of dislodging the carbon from the surrounding tissues, and by uniting with it, it is converted into a state that facilitates its escape from the blood.

The abundance of carbon in venous blood, is by all admitted to be the cause of its dark modena color, and its derivation from any source does not seem so probable, as from the solids, that are constantly interchanging particles of matter with the blood in the capillaries. Now, if we compare the state of interstitial absorption at the different periods of life, with the condition of the venous blood, at corresponding periods, we shall see that there must be some connexion between the former and the latter. In the fœtus in utero, nutrition is active, while interstitial absorption has scarcely commenced, and there is, consequently, but little difference between the blood in the arteries, and that in the veins. In childhood, the body is rapidly growing and being developed, and nutrition, of course, is active, while interstitial absorption is comparatively feeble. Venous blood is, during that period, darker than during intra-uterine life, but it is of a much lighter hue, than it assumes subsequently. After growth has terminated, and the body has attained its full volume, an equilibrium is established between nutrition and absorption, and then a more marked difference is observed between arterial and venous blood, than is seen at any previous period. In the decline of life, interstitial absorption predominates over nutrition, as is evinced by the gradually disappearing rotundity and plumpness of the body, and we find then that the blood of the veins is of a darker complexion than

at any previous epoch. Again, as the blood becomes blacker, and blacker it seems to become less and less vital, as is evinced by its diminished tendency to coagulate. The difference in the specific gravity of venous and arterial blood, as well as their other points of dissimilitude, may be easily and we think, satisfactorily explained, according to the views in regard to interstitial absorption, above announced.

LETTER TO THE EDITOR ON CONGESTIVE FEVER.

BY J. TAYLOR BRADFORD, M. D.

AUGUSTA, KENTUCKY, FEBRUARY 28TH, 1842.

PROF. J. C. CROSS:

Dear Sir;—"The communication of information acquired in practice, however trivial the facts may appear at first view, may, at a future period, be found useful to others." Encouraged by this assurance, and observing brevity as much as possible, I venture to send you a few observations, which, although not entirely original, nor coinciding perfectly with what others have said, will, I trust, be found serviceable.

In the "waste of human life," with which, during my short professional career I have had to contend, I have found no disease so mysterious in its nature, or difficult to manage, as the congestive fever, which prevailed with great malignity during the past year, in the county of Bracken. In the south-western part of this county, the 'extreme form' of congestive fever prevailed, and with a fatality, altogether without precedent, if we except that besom of destruction, Asiatic Cholera. The attack of congestive fever was so unlike that of any other disease, with which I was acquainted, and so little information had I derived from books, that, until I procured the work of Dr. Armstrong, I was unable to characterize it; but in this I was not singular, for the oldest practitioners in the county were as much at a loss as myself, for some called it typus, others nervous fever: while one wandered back to Hippocrates, and aroused the plague

"From its long slumbers of three thousand years,"

and another ventured to declare that no such disease as congestive fever existed.

Unfortunately for the physician, and doubly so for the patient, this diease is most generally neglected, until it has taken such fast hold of the sources of life, as to bid defiance to the most skilfully applied remedies. Its attack, to those unaccustomed to its treacherous nature, is attended by no circumstances calculated to excite alarm, and the poor victim stands upon the brink of destruction before he dreams of asking whence this coolness of the skin—this general debility—this mental inactivity—and this repugnance to physical exertion? But too often, before the answer can be given, the subtle venom has insiduously stolen its way into every part of the system, the energies are undermined—the springs of existence dried up—and when the physician is at length called, he finds exhausted nature struggling in vain to throw off her conquering adversary. Dr. Armstrong is the only author with whose writings I am acquainted, who gives us any thing like an adequate idea of this disease in its *sui generis* form; and with the exception of Sydenham, there is, perhaps, no author who so richly deserves the gratitude of a just and an impartial posterity.

Symptoms. In the more severe form, (and it is of that form I shall principally speak,) the sufferer will have complained from ten to thirty days before being confined to his bed, of the usual symptoms of common fever, of pain in the head, limbs and back; loss of appetite; indistinct chills from time to time, and currents of heat passing over the system. But when this period has expired, and the patient is forced to take his bed, no more pain is complained of —he lies quietly as if nothing was the matter, and remains silent, except in answering the questions propounded to him, when the words seem to "hang upon his lips," as if he had not the power to give full utterance to them. They universally complain of being "tired," and if required to rise up in bed, they do it with great reluctance; the appetite is impaireed—skin cooler than in health; and the pulse weak, irregular and frequent, or oppressed as if the heart was confined. In the incipient stage, the pulse varies but little from the natural standard; but after a walk across the room, on the part of the patient, it becomes irregular, frequent, and almost indistinct. The tongue is generally clean, rather more so than in health, or if coated at all, it is with a white mucus; at first the bowels are apt to be constipated, but after being opened, they often become too laxative. The countenance, until a short time before death, is natural, when it becomes anxious,

with a wild, vacant, and bewildered stare. Now, what are the indications to be attended to for its removal?

The nervous system has received a powerful shock, similar in character to that produced by a severe blow or fall; the blood is congested in some one or all of the internal organs, as is manifest from the coldness of the surface, and the weak, irregular, and frequent pulse. The first object, therefore, of the physician, should be to restore the blood to the surface and thus to relieve the heart, and system generally, and then to rectify or restore the deranged or suppressed secretions. The remedies with which I achieve these objects, are calomel, brandy and mustard.

As to the last article, the Materia Medica does not contain a remedy that is more simple, or more easily procured—and I speak from experience, when I say, that in the treatment of congestive fever, there is not one so perfectly indispensable. I here give a case in illustration. In the month of November last, the sickly season being over, I visited New Orleans. I took passage in the steam boat Patrick Henry. At Louisville, young Mr. —, (then very feeble but still able to walk,) with two other gentlemen, took passage in the same boat. The water was low, and we made poor progress. Two days afterwards I found him suffering under the "extreme form" of congestive fever. His friend informed me that his complaint had commenced with "chills and fever," and that he had complained of debility, prior to leaving Philadelphia, some ten days before. His pulse was almost extinct—he was covered with a cold perspiration—bowels constipated—he was unconscious of surrounding objects, and being asked how he felt, he replied in a half whispering careless tone, "nothing is the matter with me, I'm—I intend to———" then he would break off, and relapse into his former unconsciousness. His tongue was perfectly clean, and nearly of the natural color—no unusual redness.

Treating his case, I kept two objects in view; one was, to maintain the strength, until calomel could have time to reform the secretions; and the other, to arouse the system to a state of sensibility—without which remedies calculated to reinstate the secretions, would be fruitless and ineffectual.

For the first twenty four hours, I gave him small doses of calomel every two hours, uncombined with any thing else; and every hour or two brandy in pretty liberal potions. This course was maintained for twenty four hours; at the expiration of which period, he did

not appear to be any better. As there was a great deal of anxiety on board, and as there was no time to be lost, I resorted immediately to the external use of mustard, for the purpose of restoring heat to the surface. I consequently applied a mustard plaster, sufficiently large to envelope the liver and bowels, and others to his ankles, wrists and spine. The last reaching from the neck to the sacrum. They were simultaneously applied, and in the course of twenty minutes he was able to chide his nurses roundly. They were taken off, and in the course of six or eight hours he relapsed into his former unconsciousness. The sinapisms were applied in the same manner again, and even a third time, they were allowed to remain on sufficiently long to produce slight reaction. At the expiration of twenty-four hours from their first application, reaction was perfectly established. He passed immense quantities of dark, thick and vitiated bile. By the fourth day to my gratification, and that of the passengers, he was almost entirely free from disease. The calomel was continued until the fifth day, when his gums became slightly affected. On the sixth day, he was taken out at Smithland, for the purpose of proceeding to Nashville, near which place, he resided. I directed him to use brandy as circumstances might require. On my return up the river, I learned that he remained in Smithland a few days, and that the directions I left, were sufficient to complete his convalescence.

Since my return home, I have had several similar cases. Mrs. C., living near town, had complained of debility for three weeks, with occasional chilly sensations along the spine. As she suffered from no pain during that time, and as the symptoms were not alarming, to use her language, she thought "it would wear away." Her skin was cool; the pulse thread-like, and on any exertion whatever, was not perceptible to the touch; she was quite weak, and when interrogated was unable to answer more than three or four words, when her voice would completely fail, and die away into an indistinct whisper.

I first gave her a tea-spoonful of brandy; then applied the *sinapisms* to the wrists, ankles, spine and liver; giving her small doses of calomel every two hours. The mustard, was a second time applied, and the calomel and brandy continued through the night. When I visited her the next day, the pulse was increased, and more regular—she was passing dark, thick bile copiously, and she was conscious of her situation and of what passed around

her. The calomel was continued for a few days, with small quantities of brandy, and in a week she was recovering.

I would take pleasure in narrating several other cases, but as they would only tend to the same conclusion, I pass them over. Reaction is the great object to be accomplished; and for this purpose, there is no remedy equal in importance to *sinapisms*, they have a specific influence upon the secretions. I am aware that it is a common practice, at some stage, of almost every disease, to use *sinapisms* to the ankles and wrists; but in congestive fever, where the whole surface is cool, as well as the ankles and wrists, they would not be, limited to those parts, sufficient to establish more than a partial and temporary excitement. Before I commenced the use of the mustard, or procured the work of Dr. Armstrong, nearly half of those that were attacked by this form of fever, and were treated with blood-letting—blistering—calomel—camphor—ammonia—emetics—purgatives and barks, as recommended by authors generally, fell victims to its ravages. I maintain that this simple and common-place remedy has higher claims upon the profession than any other single article, and when used simultaneously with calomel and 'dry brandy,' it is more certain to accomplish our aim, than any combination of which I have any knowledge. In the "extreme form" of this complaint, there is little fear of reaction being too great; if it should, however, common sense would dictate the lancet; or if any organ holds out indications of inflammation, the brandy, of course, is contra-indicated—and calomel, mustard, and beef-tea, are principally to be relied upon; but if reaction can once be fully established—no matter how much fever is produced, the patient is comparatively safe.

Anterior to this extensive, and I hope, judicious use of mustard, I did not know a single case of recovery from the 'extreme form,' without slight ptyalism having been produced; and after this, no cases were lost, unless stimulants were withdrawn too early—for, without them, in many of those cases, where the gums had been affected, there was not action enough in the system sustain it. After the soreness of the gums had been established, (and scarcely any cases recovered without it,) the mouth was the best criterion for the use of brandy—it was a perfect thermometer to the system. If the brandy was withdrawn, the gums shrank and became pallid; the blood retreated from them and there was not enough of it left to distend and give them color. But if the brandy was

resumed, the fresh florid color of the gums returned—and with it, the strength, which was lost by its too early suspension.

By the use of mustard, and the other two articles above mentioned, some few cases have recovered without any mercurial affection of the gums having been produced. But with the use of *sinapisms*, or without them, I shall always, nevertheless, until taught better—look upon slight soreness of the gums, in congestive fever, as an auspicious occurrence. And though I say this, I hope you will not understand me as wishing to be ranked with those infatuated men, who look upon salivation as necessary in almost every disease. Far from it. I know that such a course is often infinitely more to be dreaded, than the diseases they attempt to cure. I have often asked myself, what would the Vena cavaist accomplish, with his herculean doses of calomel, against this fearful malady?

In the extreme form of this disease, we should guard particularly against placing the patient in an erect position, or allowing him to get up to stool. I think that the experience of those who have treated this disease, in its most malignant form, will support me in declaring, that hundreds perish from such common acts of indiscretion. If, after any exertion—change of position—or conversation on the part of the patient, you apply your hand to the pulse in this prostrated state of the system, you will be immediately taught the necessity of his being kept perfectly quiet, until the lost balance of the circulation between the arterial and venous systems has had time to be restored.

Cathartics, either in the 'mild,' the 'intermediate' or the extreme form,' are very prejudicial, and often convert the simple form into the severe. Of the truth of this fact, I appeal to all those who have tried them, and therefore, take the liberty of recommending to all Cookites, should this disease become epidemic, to spend the days that may be spared them in atonement and repentance for their sins.

Laxatives of the mildest character I have found to be most beneficial; when I prescribe *ol ricini*, I invariably unite a small portion of turpentine with it. It appears to obviate the sickness that oil is apt to create, and the stimulus it imparts to the bowels, renders its action more prompt. The bowels may generally be operated on sufficiently by the use of calomel and gruel—but should

they continue constipated for twenty-four hours after the commencement of treatment, and as a general rule, no laxative should be given earlier, because then the discharges would be thin and watery, and often require a few drops of laudanum or paragoric to check them, and to preserve the strength, some aperient should be given. This delay is somtimes important, for it gives the calomel time to make an impression on the liver.

Opium is often essential and salutary. I recollect a case, where there was delirium, the patient could scarcely be kept in bed—his pulse was oppressed,—perspiration cold, and with other indications of a fatal termination, in which I determined, as a dernier resort, to give opium. The nape of the neck had been already blistered without benefit, for from the first, there had been no unusual heat of the head. I gave him a tea-spoonful of laudanum every two hours, until two potions were taken. This had no effect. Then at the expiration of every two hours, I gave him a table-spoonful, until the third was taken, when the patient fell asleep. He slept, except at short intervals when aroused, for three days and nights; but during that time his pulse and the temperature of his skin increased.

Unfortunately for the sufferers from this disease, too much medicine is given, and what is given, is given too indiscriminately, and without any very well defined object in view. There can be but little use in a multiplicity of articles, particularly in the treatment of fever. The objects to be accomplished are few, and they are best attained by simple means. One of these is to correct the secretions, and for this purpose, no fifty articles in the Materia Medica are equal in certainty and efficacy to calomel, and as a stimulant, brandy is superior to all others, and as a general rule, they should be administered together. When, however, the bowels are too soluble it may be united with opium.

Too much medicine is given internally, while too little attention is paid to the surface. Calomel and brandy given internally or the former alone, where there are indications of gastro-enteric inflammation, while sinapisms are repeatedly applied to the ankles, wrists, spine, liver and bowels will accomplish much more than all other remedies, that I have ever seen tried.—Formerly, I was in the habit of using blisters to produce reaction, and to remove local congestion, but experience has taught me that no reliance

is to be placed in them. They are slow in acting, and if they act at all in this debilitated state of the system, the blistered surface has a light color, and it discharges profusely, (and thereby weakens the patient) with little or no irritation, or lasting benefit. This being the fact, *sinapisms* have a decided superiority over blisters. They produce heat and irritation without exhausting the system, and as far as I have been able to observe, they are of unequalled efficacy in equalizing the circulation.

When we press in the course of the spine it is not unfrequently found to be tender, but whether this results from inflammation, or merely congestion, I cannot say; but this I know, the action of mustard will remove all uneasiness, and give increased energy to the nervous system, upon which the circulation is as dependent, as the secretory system is upon the circulation.

But I am becoming tedious, and must hasten to a close. Since I commenced the treatment of this disease in its aggravated form, I have become fully convinced of the truth of the declaration, made in one of your lectures on the "Functions of the Liver," that calomel, in small doses, is a stimulant.

A few days ago I read a second time your "*Essay on the Absorbent System*," with renewed gratification. Indeed your invaluable lectures are a part of my being.

> "And register'd where every day I turn
> The leaf to read them."

Among the warmest of your admirers and friends, you may ever count your obedient servant,

J. TAYLOR BRADFORD, M. D.

MODUS OPERANDI OF MEDICINES.

BY WM. SYDNEY GREEN, M. D., OF MEMPHIS, TENNESSEE.*

THE following article constitutes the outlines of an Essay, intended for the National Institution for the promotion of Science. As it will require much time and labor, however, to complete the original design, and as it is my desire to bring other

* For the opinions contained in this article, or any other, of which he is not the author himself, that may appear in this Journal, the Editor does not wish to be considered, in any way, responsible.

minds of larger calibre, to bear upon the subject, I hope, Mr. Editor, that you will not deem the subject too theoretical to find a place in the Medical Recorder.

If a theory in medicine does not contradict a single truth—if it is founded in reason—if it renders the study of Science more easy—if "a why and wherefore" can be shown as the basis of every proposition—then this theory must become a part of the stock of our practical information. We dislike to read a long theory, concerning any subject, because we do not gather more than one or two practical ideas from it; but I feel persuaded, that the theoretical views herein contained, shall be so short, that the practical matter will pay the cost of their transportation. There are certain substances in nature, which when applied to the living human fibre, produce a change in the natural action of different parts of the body. These substances bear the appellation of medicinal agents. The manner in which they act, and the particular parts of the body which they affect, is that which is designed to be shown. To explain the modus operandi of medicines, we shall not call in the aid of the humoral pathology—the principle of sympathy—the vis-medicatrix, nor shall we run into the errors of Hahnemann; for medical men understand these things sufficiently well. Without attempting to prove the following propositions, we will simply admit them to be true, and see to what practical result they will bring us,—for it would require volumes to convince some of the medical fraternity of their truth. Firstly; that a combination of nervous and vascular material constitutes the whole organization of man. The different organs are formed by a deposition of inorganic material in the meshes of the tissues, formed by the combination of the nervous and vascular systems. The vascular system consists of all the vessels circulating the fluids of the body. It is impossible for life to be manifested, except in the capillary vascular system, or in the nerves. No fluid of the body posseses vitality, and instead of "the blood being *alive*," according to Hunter's version of the Scriptures, it reads thus, "the blood of an animal, which is the life *thereof*." Secondly; the particular action of every organ depends upon the different quantities of nervous and vascular material entering into their composition.—Thirdly; all medicinal agents operate upon either the nervous or vascular system. Fourthly; medicines operating universally upon

neither of these systems, restrict their action, to some one subsytem. Fifthly; medicines operate by either increasing, or diminishing the natural quantity of electricity in any particular part of the body. Sixthly; in proportion to the facility with which medicinal substances impart or receive electricity, to or from the human organization, will be the violence of their action. Seventhly; negative electrics operate upon the nervous, but positive electrics display their action upon the vascular system. These propositions are the offspring of arguments too numerous to be embodied in so short an article as this, and I hope they will be proved to be founded in reason. It may be said that there are chemical and mechanical remedies, which do not operate upon the living solid texture, but we find that antacids *correct* the excessive secretion of acidulous matter by the stomach. Lithontriptics *prevent* the formation of calculi—stimulants and emollients *soothe* the irritation of the mucus membranes, and anthelmintics *destroy the tendency* to the formation of worms. All these show an *action* on the living solid texture. All medicines, then, must operate upon the nervous or vascular system, or upon both. But it seems that nature, in the chemical combination of minerals, and the formation of medicinal plants, designed that their action should be limited to one of the two systems. Medicines, if received into the stomach, produce an electric action, and that action is transmitted, whether through the circulatory or nervous system to those parts of the body, the regular galvanic action of which, in health, most clearly approximates in quantity and kind, that which has been transmitted. Thus, the galvanic action constantly occurring in the nervous ganglia, most closely approximates in quantity and kind that electric action which is transmitted, on the reception of a narcotic from the stomach, or from any other part of the body, which may be constituted the centre of action.

Having carefully studied all the systems of Materia Medica which I could procure, together with the notes I took from the very excellent lectures of Prof. Mitchell; during my last winter at Transylvania University, I find that different authors pursue different plans in the classification of the articles of the Materia Medica. The alphabetical arrangement of Dr. Paris is adopted in the lectures of Dr. Mitchell. Dr. Beck, disliking the arrangement of Cullen, has written a new edition of the old system of

Murray; and Dr. Chapman calls in the aid of sympathy, to explain the modus operandi of medicines, and arranges whole classes accordingly. If a medicine produces emesis sometimes, it is no reason why it should be confined under the class of emetics; for the same medicine in a smaller dose will, perhaps, produce *nausea*, and under some circumstances *purgation*. The action in all these cases, however, is the same; thus, if it be Ipecacuanha, it operates on the vascular, and if Tartar emetic, on the nervous system, as will be shown presently.

The Nervous System naturally divides itself into three parts, upon which medicinal agents act. Firstly—the nerves of sensation, consisting of the Brain, Olfactory nerves, Auditory nerves, Optic nerves, Gustatory nerves, and the reta mucosum, in which membrane thesense of touch is concentrated. Secondly—the nerves of motion, which supply the muscles of locomotion, respiration, deglutition and articulation. Thirdly—the nerves of circulation, supplying the heart, arteries, lacteals, exhalents, cellular absorbents, veins and lymphatics.

The Vascular System is also divided into three parts, or tissues, upon which medicines act. It is true, that authors tell us of a great number of tissues composing the human organization, but for practical purposes they may be reduced to only three susceptible active tissues. We may trace the alimentary canal—the lacteals—and follow the whole course of the circulatory system—the secerning and emunctory organs, and still we find three membranes, the inner answering the purposes of mucous—the outer of serous, and the middle of cellular tissue. These combine in different proportions according to the part which they have to act in supporting the animal economy.

From the preceding premises, I have formed the following table as a classification of the articles of the Materia Medica. I have at the left hand side, shown eight classes, and some of the principal medicines belonging to each class; while at the tops of the columns, I have exhibited the organs on which the different medicines act, without showing the kind of action. Opposite the medicine, and underneath the organ will be found an (e.) mark showing that that medicine operates upon the particular organ specified.

TABLE.

Class 8th. Serous Tissue.							Class 7th. Mucus Tissue.							Class 6th. Cellular Tissue.							Class 5th. Universal Vascular System							Class 4th. Nerves of Sensation.							Class 3rd. Nerves of Motion.							Class 2nd. Nerves of Circulation.							Class 1st Universal Nervous System.							CLASSES.
Polygala Seneka.	Senæ Folia.	Gambogæ.	Euphorbia Officin:	Super-Tart: Potassa.	Scammonia.	Elaterium.	Colocynth.	Aloes Soccotrine.	Balsam Copaiva.	Asclepias Tuberosa.	Sub-borate Soda.	Quercus.	Scilla Maritima.	Alum Sulph:	Plumbum Acetas.	Spigelia Marilandi:	Calcis.	Oxy-Muriate Potass.	Juglans Cathartica.	Podophillum P. Itat:	Jalapa Convolv:	Sanguinaria Canad:	Uva Ursi.	Cuprum.	Cinchona.	Ferrum.	Ipecacuanha.	Eupatorium Perfol:	Hydragyrum.	Digitalis Purpurea.	Blood Letting.	Oil of Cloves.	Mentha.	Citric & Ac. Acids.	Larkspur.	Moschus.	Pix Burgundica.	Sinapis Alba.	Savin.	Tulipifera.	Liriodon.	Prunus Virginiana.	Bitumen Petroleum.	Galbanum.	Oleum Cajuputi.	Oleum Succini.	Castoreum.	Ferlua Assafœtida.	Cantharis Vesicat:	Phosphorus.	Sulphuric Acid.	Argentum Nit:	Iodine.	Kreosote.	Nitric Acid.	Arsenic Alba.	Strychnia.	Camphor.	Conium Maculatum.	Atropa Balladonna.	Hyosciamus Niger.	Alcohol.	Opium.	Nicot. Tabacum.	
																																																								Salivary Glands.
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e								e	e		e												e			e		e	e																				e								Lungs.
e			e					e		e						e					e		e				e		e	e																										Kidneys.
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		e	e	e		e	e	e										e	e	e	e								e	e																										Heart and Arteries.
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																e											e	e	e																											Cellular Absorbents.
																													e	e																										Veins and Lymphatics.
													e											e	e	e			e	e																										Muscles of Respiration.
e	e	e		e	e	e							e					e	e	e				e	e	e	e		e	e																										Muscles of Locomotion.
																e			e		e			e		e	e		e	e				e	e																					Brain.
																															e	e	e	e	e	e	e	e																		Nerves of Sensation.
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									e																			e	e																											Testes and Ovaria.

The remaining articles belonging to Class 1st, are, Datura Stramonium; Rhus Toxicodendron; Arnica Montana; Valeriana Officinalis; Ether; Aconitum Napella; Lactuca Virosa; Lactuca Sativa; Rhododendron Chrysanthum; Humulus Lupulus; Prunus Laura Cerassus, and Barytes.—The other articles belonging to Class 2d, are Tartris Antimonii; Chlorine; Bromine; Terebinthinæ Oleum; Croton Tiglium; Heat; Oxalic Acid; Veratria; Lobelia Inflata: Phytolacca Decandria; Capsicum; Sulphur and Anthemis Nobilis.—The balance of the 3rd Class, are Serpentaria Virginiana; Tela Aureliana; Magnolia; Salix; Cornus Florida and Phloridzine.—To the 4th Class is added Bismuth; Cadmium; Anthemis Pyrethrum; Arum Maculatum; Cotton; Tea; Coffee; Sassafras; Lemon; Orange; Nutmeg; Mace; Carroway; Anise; Pimento; Acorus Calamus; and Cinnamon Cortex.—To complete Class 5th, Aurum, and Ammonia are added.—Class 6th is formed by the addition of Cold; Manganese; Daphne Mizereum; Diosma Crenata; Hydropiper; Potassa; Soda; Indigo; Myrrha; Liverwort; Ictodes Fœtida; Carbo Ligni; Yeast; Ricinus Communis; Oelum Olivarium; Viola Tricola and Ratanhy. The 7th Class contains, besides the articles already mentioned, Catichu; Kino; Compechianum Lignum; Geranium Maculatum; Punica Granita; Allium Sativum; Armoraciæ Radix; Prickley Ash; Sambuca Flores; Rubus; Quassia; Gentian; Magnesia; Glycariza Glabra; Elmi; Cassia; Manna; Balsams Tolu, Peru, and Gilead; Acacia Gummi; Sage and Rosa Gallica.—The remaining articles of Class 8th, are Gratiola Officinalis; Ammoniacum; Sal: Epsom and Glaubri; and Spirits of Nitre, and Nitrate of Potash.

Having thus arranged the articles of the Materia Medica, the idea was suggested that it might possibly be of some use to young Students of Medicine; for the most important articles are mentioned first under each Class, and in the Tabular view the greatest number of (e) marks show the most active articles at a glance.—A Tabular view of *Diseases* might be formed on the same plan, exhibiting the effect of different diseases upon the vital organs, and the nerves or tissues on which they act. Thus, that morbific agent which produces *Fever* acts upon the *Circulatory Nerves* at first; and the *remedial agents* must come from that class which operates on the *counteracting Vascular System.* Eventually, however, the *universal Nervous System*, may be implicated; when we require

the *same Class* of Medicines; but select those which operate more particularly upon the *arteries and exhalent vessels;* such as Ammonia, Cinchona and Ferrum.

ON THE TREATMENT OF PLEURISY.

FROM DR. WATSON'S LECTURES AT KING'S COLLEGE, LONDON.

As to the *treatment* of pleurisy, you will have anticipated that in the outset of the disease we must have recourse to the lancet. I have stated more than once that bloodletting *tells* more, and is better borne, in inflammation of serous membranes, than in any other case. If you see the patient while the stitch in the side and the restrained and cautious respiration are present, you will bleed him, in the upright posture, from a large orifice, until the pain is relieved, and he can draw a full breath again with ease and satisfaction; or until he is about to faint. And if the pain and catch in the breathing should return, and the pulse continue firm and hard, you will bleed again in the same way; or cover the painful side with leeches; or abstract blood by the cupping glass and scarificator. It is best to bleed fearlessly at first, and in proportion as you do so the chance will be diminished of a repetition of the bloodletting being needed. The blood, in pleuritis, is always deeply buffed and cupped.

Tartar emetic, which is so useful when the mucous membrane of the air-passages is inflamed, is *not* adapted to inflammation of the pleura. On the other hand, mercury, from its well known power to check the effusion of coagulable lymph, is *especially* indicated. Of course it is to be given with a view to its specific effect on the system; i. e., in equal doses repeated at frequent and equal intervals, and guarded by a small quantity of opium. And in very severe cases, or when the internal employment of mercury is in any way contra-indicated, recourse must be had to inunction of the linimentum hydrargyri, or of the strong mercurial ointment.

By the early and vigorous adoption of these measures, the inflammation may generally be subdued in no long time. If, though the fever diminish, there still be pain in any part of the chest, leeches may be again applied, or the part may be covered with a blister. I do not think a blister does any good—on the contrary, it is likely, by the additional irritation it causes, to do harm —while the inflammation is yet recent and active.

But though pain may have ceased, and no fever remains, and the patient is not conscious of much dyspnœa, there may be, and there often *will* be, evidence, not to be mistaken, of effusion into the cavity of the pleura. Dulness, I mean, on percussion, bronchial respiration, ægophony; and the object of our treatment is now to get rid of the fluid. We seek to do so by keeping the patient on low diet. The more (says Broussais, with some quaintness), the more the patient eats, the sooner he will die. We pursue the same object by keeping his gums tender with mercury; by applying blisters one after another to the affected side; and by purgatives and diuretics. By keeping the vessels empty we facilitate, as much as in us lies, the absorption of the liquid contents of the pleura. A very good form of diuretic for this state of matters is a combination of squills, digitalis and mercury. Half a grain of digitalis, one grain of squills, and three or five grains of blue pill, repeated and continued according to the state of the mouth.

Under this kind of treatment the effused fluid will often be completely removed; and the chest restored to its former state. I last week dismissed a lad from the hospital in whom all this took place.

But in other cases, though the fever and the inflammation are at an end, and absorption of the liquid takes place, the parts within the thorax do *not* revert to their original condition. This we know by that shrinking of its dimensions on the side affected, which was described in the last lecture. This shrinking and narrowing is the *necessary consequence* of the absorption of the liquid, *unless* the compressed lung dilates again in proportion as the fluid is taken up. In most cases of this kind the lung *cannot* rise; being bound down by thick and firm false membranes; and then the deformity is irremediable, and lasts for life. If the lung is completely emptied of air, and enveloped by strong bands of

lymph, so that it is permanently unable to admit air again—in that case, as the bony framework of the thorax can yield to a certain extent only, there will always remain, I presume, some liquid in the pleural cavity. If, again, the lung recovers a part of its lost volume, and *meets* the contracting parietes of the chest, adhesion may take place, and the cavity of the pleura be obliterated by thick layers of false membrane. And other changes are apt to arise in the lymph which is adherent to the pleura in these cases of imperfect repair. Sometimes tubercles form in it. Sometimes ossific matter is deposited. I show you a fine specimen of this kind of ossification of the pleura. There is yet another supposable case: the investing adventitious membrane may be thin, weak, and yielding; and though the lung may not expand to its full dimensions at first, it may gradually force its way against the binding power of the coagulable lymph, and then the external configuration of the chest may be restored, and the symmetry between the two sides return. That this sometimes takes place I cannot doubt; but I have only once met with a case in which the dwindling of the side was *entirely* recovered from. In May, 1834, I was asked to see a child four years old, who had had cough, and wasted to mere skin and bone, after scarlet fever. I found the whole of the right side of the chest perfectly dull on percussion, and no respiration could be heard on that side. He was taken by his parents into the country, and I did not see him again for some weeks. He then had ceased to cough, and, in a great measure, had regained his strength; but he presented, on the side which had been dull, the most marked and complete example I ever saw of the sinking in of the ribs, flattening and shrinking of the chest, and depression of the shoulder, which denote by-gone pleurisy and diminished size of the lung. About a year from the occurrence of the original disease his father brought him to my house, that I might see the change which had taken place. The boy was plump and rosy and in perfect health; the right side of the chest was as full and round as the other; the symmetry of the two sides was completely restored; the breathing perfect and natural; and the sound on percussion hollow. His father, to whom the former shrunk state of the side had been pointed out, told me that he had watched, with deep interest, the process of recovery, and that it had been very *gradual.* Whether after once having subsided, the ribs ever quite return to their nat-

ural position in the adult subject, I do not know. I have never seen that happen.

There are yet other cases in which the effusion continues and increases, and the side, instead of shrinking, enlarges; the functions of the lung on that side are entirely abolished; nay, the use of the remaining lung is greatly interfered with, by the pushing over of the mediastinum; and the patient is in imminent danger of suffocation. In such cases, whether the effusion has taken place rapidly or slowly—whether the disease has been acute or chronic pleurisy—we must relieve the oppressed lung by *letting the fluid out*—by tapping the thorax; and the sooner that is done, when such a state of things exists, the better.

The operation is not difficult or formidable; but a mistake in the diagnosis may be *very* formidable. I have heard of two instances, one in Scotland, and one in this town, in which the operation of paracentesis thoracis was determined on to relieve the oppression caused by the empyema: but the opening was made on the wrong side; and the patient in three minutes was, in each case, a corpse. There was effusion, which had already put a stop to the play of one lung: and upon air being admitted to the surface of the other, it collapsed also, and immediate suffocation took place. I do not mention these mishaps to deter you from performing the operation. They both took place some years ago. Such a mistake would be unpardonable now. But I mention them to show the necessity of our being sure of our ground before we proceed to open the thorax of a living person. A surgeon told me very recently that with the sanction, and at the suggestion, of a physician, who understands auscultation exceedingly well, I believe, he passed a trocar into the chest of the patient; but no fluid followed, to the no small mortification of the physician. This proved to be a case of malignant disease of the lung; and fluid was let out afterwards by puncturing the thorax in another place, and much relief was afforded; although, of course, the disease proved ultimately fatal. The surgeon informed me that he had suspected the true nature of the case, from observing a livid protrusion in front; which was, in fact, the specific disease making its way through.

You will take care, then, to survey the chest narrowly before you plunge a trocar into it. If you see by your eye, and ascertain

by measurement, that one side is larger than the other; if the intercostal depressions be effaced on that side; if the whole surface affords a dull sound when percussed; if the side does not move at all, or scarcely moves during respiration; if no vibration can be felt on that side when the patient speaks; if no breathing can be heard in the corresponding lung; if the heart be found beating in an unnatural place, down towards the left hypochondrium, or in the other direction on the right of the sternum; and if, at the same time, the other side of the chest moves freely, sounds resonantly, communicates a thrill to the hand while the patient converses, and is full of *puerile* respiration; then you may be sure that the larger side is distended with fluid.

But it does not follow that you should, therefore, open that side. The propriety of doing so will depend upon circumstances.

In my judgment, that operation ought never to be performed unless the life of the patient is, or seems to be, in jeopardy, from the continued presence of the liquid within the thorax.

Now life is plainly in jeopardy when the vital functions of the lungs, or of the heart, are greatly hindered; when symptoms present themselves of approaching death by apnœa, or by syncope. If we discover no cause for these symptoms, except the increasing pressure of liquid pent up in the pleura, we are warranted in ascribing them to such pressure, and bound to act upon that persuasion. Whenever, with the physical signs of abundant effusion, we have great labor and distress of breathing, an anxious and livid aspect, a tendency to delirium—or extreme faintness, and a vanishing pulse—there is no time to be lost: it is our duty to propose and urge the mechanical removal of the pressure which must else be fatal.

Again, when the patient, without suffering much dyspnœa while he lies quiet, yet is evidently losing ground from day to day, and early death by asthenia appears, without the operation, to be inevitable; and when all other means for getting rid of the imprisoned liquid have failed; and when no other condition of disease, or of advanced age, exists to account for the progressive sinking: then also, in my opinion, the patient should not be denied the *chance* which the operation may afford.

Thirdly, whenever (no matter how we ascertain the fact) the effused liquid consists of *pus*, it should be let out.

In either of these three predicaments, and in no other, should we be justified (as I think) in making an opening into the living thorax.

But I wish to be understood as giving you simply the impression which my own experience has made upon my own mind. I know that some practitioners recommend the early employment of the trocar; while (they say) the false membranes, which are apt to prevent the collapsed lung from expanding again, are yet tender and unorganized. But surely we should risk much, and gain nothing, by admitting air into the pleura while the inflammation is still in progress. Most cases of mere pleurisy with effusion do well. The mortality from uncomplicated pleurisy is exceedingly small. It would, I fear, be vastly augmented if every patient having manifest effusion were to be tapped. The danger of the operation is this; that it may, and probably will, induce suppuration, or cause the effused liquid to become putrid. Generally the effusion consists of serous fluid, which is at length spontaneously re-absorbed: the lung expands again, or the walls of the chest shrink i nwards: and the ultimate state of such a patient isas good as it probably would be after a successful tapping.

To make assurance doubly sure, it is always right, before proceeding to the operation of paracentesis, to adopt the expedient first suggested and adopted I believe by Dr. Thomas Davies, of trying the chest by means of a grooved needle; making a tentative exploration of the nature of its contents in that manner.—The passage of this little instrument—like the dismissal of a pilot balloon—affords information which is useful in guiding the particulars of the subsequent operation. It not only ascertains that there really is liquid within the pleura, but it discovers the kind and quality, and exact place, of the liquid. If it be serous, it will flow readily along the groove, and trickle down the patient's side. If it be puriform and thick, it will not exude so freely, but a drop or two will probably be visible at the external orifice; and when the needle is withdrawn, its groove will be found to contain pus. In the former case, it is possible that there may be no false membranes; in the latter they are likely to be thick. You would use a larger trocar to evacuate the thicker fluid.

The puncture thus made is quite harmless; and inflicts very trifling pain. Dr. Davies gives this useful piece of advice in res-

pect to the trocar, that its point should be *sharp*—for otherwise, after the serous membrane has been penetrated, if there happen to be thick, tough layers of coagulable lymph, not very closely attached to the costal pleura, they may be driven before the instrument, and so the liquid will not be reached, but the operator will be perplexed and baffled.

Connected with the operation of paracentesis thoracis itself, there are some questions concerning which medical opinions and medical practice are not yet settled. I do not pretend to decide these questions: yet I cannot pass them by. I must point them out to you; and I shall, at the same time, state what my own observation has suggested in regard to them.

1. Should all the liquid be let out at once?

Some say yes: some say no. If we appeal to experience on this point, we obtain no satisfactory answer. I have known patients get rapidly and perfectly well, after as complete an evacuation of the liquid as was possible. On the other hand, I have heard of speedy recovery, when, by a sort of accident, very little had been withdrawn: enough to relieve the pressing distress; but much less than the operator intended.

We must try the matter, therefore, by our reason.

I think it very probable that when the serous membrane is *stretched* by the pressure of its contents, its natural absorbing power may be lessened. But we have no reason to suppose that the mere relief of this tension will *often* suffice to renew the process of absorption, and to enable the flattened lung to re-expand.

The theoretic objection to the thorough emptying of the thorax in such cases is, I conceive, that the introduction of air is likely to be hurtful, by converting the adhesive into the suppurative form of inflammation, and by promoting decomposition of the extravasated fluids. No doubt there is this risk; but, in general, it cannot be avoided. Unless the lung freely rises at once, the liquid *cannot* all, or even much of it, come out, without air getting in. Some attempts have indeed been made, of late, to draw the water into an exhausted bag, by the help of a pipe and stop-cocks. But it is obvious that, in most cases, very little can be so abstracted. The mere admission of air to the pleura does not necessarily *create* inflammation of the membrane. This we know from what happens sometimes in emphysema produced by a fractured rib. In the

only instance of *pure* pneumo-thorax which I ever saw, the sac of the pleura had become half filled with air, through a very minute opening in the pulmonary membrane, communicating with the air-passages. There was *no* inflammation of the pleura in that case. Except that it was preternaturally *dry*, it seemed perfectly healthy. Neither does the access of air necessarily superinduce suppuration in the membrane already inflamed. Certainly, if pus follows the passage of the instrument, as much should be removed as we can get. And for my own part, I should take away as much as would come, if the enclosed liquid proved to be serous.

2. Is the orifice to be healed up, or to be kept open?

Here, also, practical men differ. I should say, if pus comes out, by all means keep the aperture open; and inasmuch as detension of the pus would be injurious, and the depending point is difficult to hit, and the orifice is apt to clog, I would do more than leave it open: I would draw the puriform fluid off twice a day by a syphon.

If serum is let out, by all means close and heal the wound. Then, if all goes on well, our object is achieved. But should the condition of the patient fail to improve; should hectic fever, after a day or two, set in or even continue; should much constitutional distress or disturbance arise—under such circumstances I would re-open the wound. There *was* mere serum, or liquor sanguinis; there now *is*, in all prabability, puriform matter pent up in the pleura; and even stinking and poisonous gases.

On six occasions I have myself witnessed the evacution, by puncture, from the human pleura, of a clear transparent liquid. Some of the patients were under my own charge, some under the charge of others. Of these six patients one died the day after the operation; I can scarcely say why. She was an extremely timid and susceptible young woman, and I am inclined to attribute her death to the shock produced, by apprehension of the operation, upon her sensitive nervous system. Two others recovered forthwith and perfectly. The wound presently healed in the three remaing cases also; but in one of the three it soon broke out again, and a quantity of healthy pus was discharged daily. After some time the expedient of keeping the cavity free from accumulated pus by the use of a syphon was resorted to. Under this plan the discharge became gradually less and less, and atthe end of many months it finally ceased. The patient has

a contracted chest, but his general health is quite re-established. He was on the brink of suffocation when the operation was performed. I have been told of a man who, for the last fifteen years, has had similar thoracic fistula, and who has nevertheless, during nearly the whole of that period, been actively engaged in the various labors of a farm servant.

I have still two of the six patients to account for. They were both much relieved by the operation for a while: but after a few days they again fell off, and after many more days of gradual sinking and distress, they died. The cavity of the pleura contained, in both cases much puriform liquid, and a quantity of most offensive gas, consisting in great part, as I judged from its odor, of sulphuretted hydrogen. I have since thought that both these patients would have had a much better chance for life, if this mass of corruption had been daily removed.

Again, I have twice seen *pus* let out, by the *primary* puncture of the chest. One of these two patients sunk, exhausted, some months after the opening, which never healed, was made. The empyema of the other had been occasioned by fracture of a rib.—The discharge continued for a short time, then ceased, the orifice closed, and the lad got well.

This constitutes the amount or nearly so, of my personal experience of the operation of paracentesis thoracis. You will see, in the statement I have been making, the grounds of those opinions which I have formed and expressed respecting it. A full and final solution of the grave and difficult questions that it involves would require a much wider field of observation than any one individual is likely to command. Dr. Thomas Davies has published a tabular account of the several cases of operation which he had then superintended. In sixteen cases of empyema, so treated there were twelve recoveries; that is, the operation was successful in three fourths of the whole number of cases: a very encouraging result. In three of the less fortunate ones, the lung could not expand after the evacuation of the fluid, in consequence of the thickness of the false membranes covering it.

The value of Dr. Davies's table would have been greater, if it had shown in each case the time, after the commencement of the disease, at which the operation was performed; the symptoms that called for its performance; the nature of the liquid evacua-

ted; and whether the orifice made by the trocar was closed or not.

The quantity of liquid which the distended pleura is capable of holding is enormous. I have seen upwards of a gallon let out at once. Dr. Montgomery mentions the case of a patient of Dr. Croker's, in Dublin, from whose left pleura Mr. Crampton drew off the almost incredible quantity of fourteen imperial pints of pus. Of course this could not have accumulated there without making injurious pressure in all directions: upon the ribs, upon the heart and mediastinum, upon the diaphragm, and the abdominal viscera beneath it. It is interesting to know with what rapidity the capacity of the diseased side of the thorax will, in favorable cases, diminish. The same writer gives the history of a boy, 12 years old, in whom the circumference of the diseased side was sixteen inches and six lines, while that of the sound side was fourteen inches and one line. Nine days after the operation the circumference of the diseased side had decreased nearly 3 inches; it measured 13 inches and 9 lines; that is, rather less than the circumference of the healthy side. The side had shrunk somewhat within its natural size. This is common in such cases.

There is yet a third question of some importance. Whereabouts should the opening be made?

If any soft inelastic tumor has appeared, marking a tendency in the effused liquid to make its own way outwards, that tumor should be punctured without loss of time; for there will then be *no* chance of the re-absorption of the pus; and if the swelling be left to itself, troublesome, burrowing sinuses will be apt to form in the thoracic and adominal parietes. As we have no choice in such case about the place where the aperture is to be made, authors have termed the operation *the operation of necessity;* and they distinguish the case in which the surgeon is at liberty to introduce his trocar wherever he pleases; they say that then the *operation of election* takes place. Now the question is, what spot is the best for this operation of election?

If there be any part of the surface which is resonant on percussion, or which affords any sound of respiration, that part must be avoided. It is probable that the lung, in that place, is fastened by adhesions to the costal pleura. Of course you would not thrust in a trocar where you saw or felt that the heart was beating.

The object to be kept in view is that of making the opening in

the situation which will allow the freest and most perfect vent for the liquid. The intercostal space between the sixth and seventh true ribs, where the digitations of the seratus major meet those of the obliquus externus muscle, is the place usually recommended. Laennec prefers the space between the fifth and sixth ribs. He observes that, on the right side, an enlarged liver frequently reaches as high as the sixth, or even the fifth rib. When the diaphragm is pushed as high as this (and I believe that Dr. Edwin Harrison, who has paid much attention to this point, will tell you that it is often pushed up even higher) there is an obvious risk of penetrating it with the trocar. In fact, Laennec committed that error himself. After making an incision between the fifth and sixth ribs, he thrust the instrument, as he supposed, into the thorax; and was a good deal surprised to find that no gush of liquid followed its introduction. The patient died; and dissection showed that the trocar had entered the cavity of the abdomen after transfixing the diaphragm, which, having been forced upwards by a large liver, had contracted firm adhesions to the seventh rib. I have myself witnessed a similar mischance, on the other side of the chest.—The integuments of the side were œdematous; and it was thought that a little serum issued upon the passage of the grooved needle. This serum must have come from the infiltrated cellular tissue.—No liquid was evacuated by the trocar. The patient died a day or two afterwards of peritonitis. The instrument had perforated the diaphragm, and entered the spleen, which was unusually large.

I am tempted to relate the particulars of one of the prosperous cases that I before briefly adverted to. It occurred in a lad of 19; a patient of my colleague, Dr. Wilson. On his admission into the Hospital he bore all the marks of copious effusion into the left pleura; the side enlarged and motionless, and dull on percussion; the intercostal spaces tense and even with the ribs; the heart beating to the right of the sternum; respiration puerile on the right side, inaudible on the left; urgent dyspnœa; a tendency to coma, marked by drowsiness and blueness of the cheeks and lips. In short, the boy was on the very verge of suffocation. He had been ill about a month; and had been bled, and cupped, and brought under the specific influence of mercury. Dr. Wilson judiciously directed that the liquid should be let out.

A grooved needle was first passed between the fifth and sixth ribs; and some serum following the puncture, a trocar was then introduced by Mr. Tuson, and nine pints of clear fluid were drawn off. During the operation the patient became faintish at times, and then the orifice of the canula was stopped for a moment by the finger. The immediate effect of the tapping was most interesting and gratifying. Even while the liquid was flowing the heart was observed gradually to move over from beneath the right mamma towards its natural situation; and his difficulty of breathing was signally relieved. At the beginning of the operation he respired fifty times in a minute; at its conclusion thirty-eight times only. A good deal of air entered while the liquid was escaping; and for some days after the operation a splashing sound was audible on succussion of the chest; and one part of that side was unnaturally resonant, when struck, and another part unnaturally dull; and whatever was the posture of the patient, the hollow sound was uppermost, and the dull sound undermost; and when he sat up and spoke, or coughed, a brazen resonance was heard by the ear applied to the scapular region. This lad got quite well, without the recurrence of a single bad symptom. He afterwards presented himself at the Hospital; and I understand that the left side was found to be in a very slight degree smaller than the right.

The liquid evacuated in this case was clear and transparent. It separated on cooling, into three parts; one of quite watery consistence, one more viscid, and a third which constituted a soft, transparent, jelly-like mass of fibrin.

In this instance no injurious consequences resulted from the free admission of air.

It may sometimes be necessary to puncture the cavity for *mere* pneumo-thorax: when for instance, the pulmonary pleura has been pricked by a fractured rib, and air passes from the lung into the pleural sac faster than it can be absorbed; fast enough to compress the lung, and to threaten death by apnœa. The diagnosis of such a state cannot be difficult. The existence of the fracture, the tympanitic sound given by the chest on the injured side, the absence of respiratory murmur in the tympanitic part, and the increasing dyspnœa, all point to the same conclusion. Now a trocar of the smallest size—or even an acupuncture needle—would suffice to give vent to the imprisoned *air*, which will escape with

an audible hissing noise. In some cases it must have existed in very large quantity, for the stream of issuing air has been strong enough to blow out a candle several times in succession; the flame being each time immediately re-lighted.

The same necessity for puncturing the cavity of the pleura from without may arise in cases of pneumo-thorax depending on specific disease in the lungs; but we cannot regard the operation as *curative* in such cases. Its value is very different from that which experience has shown to belong to it in empyema from acute or chronic pleurisy. Yet if it saves life for the time, if it prevents impending suffocation, and relieves existing distress, and postpones that fatal event, it is not *without* its value; and it has many times been done, and been followed by very gratifying results; but it has never, that I know of, been followed by entire recovery. Dr. Davies had superintended the operation in nine instances of pneumo-thorax with effusion: and *all* the patients died from tubercular complications.

There are, indeed, on record examples of recovery after the operation, when pneumo-thorax had existed, and under very unpromising circumstances. I should have stated before, that as the pus, in empyema, sometimes finds its way outwardly, penetrating between the ribs, and forming an external swelling, which, if not opened by the scalpel, will at length burst; so it also, sometimes, escapes by making a road into some part of the air-passages, and being expectorated. Now the operation of parencentesis, in such a case, *there being no tubercular disease*, has been successful. Le Dran relates an instance in which he operated for empyema, where "the injection of a small quantity of mel rosarum and barley water through the wound excited coughing, and part of it was coughed up through the mouth, mixed with pus;" thus clearly proving the existence of a fistulous passage through the lung; notwithstanding which the patient recovered completely. The effusion was probably circumscribed. But you will find other cases of a similar kind referred to by Dr. Townsend, in the Cyclopædia of Practical Medicine.—*Boston Med. and Surg. Journal.—From the London Medical Gazette.*

BIBLIOGRAPHICAL NOTICES.

The Practice of Medicine, or a Treatise on Special Pathology and Therapeutics. By ROBLEY DUNGLISON, M. D., Professor of the Institutes of Medicine, &c., in Jefferson Medical College, Philadelphia; Lecturer on Clinical Medicine, and Attending Physician at the Philadelphia Hospital, &c. &c. *Philadelphia. Lea & Blanchard*, 1842. 2 vo's.; p p. 572. 750.

Occasionally, it becomes necessary for those who attend to the progress of medical improvement, to present to the public at large, a condensed, but comprehensive *resumé* of what has been done in all parts of the world, by those particularly engaged in the cultivation of the art of healing. This is a responsibility which the industrious and learned should assume, because of the utter impracticability of the great body of practitioners to find easy access to all with which they should be acquainted, that issues from the medical press. The author is of opinion, that at no time has the discharge of this duty been more called for, than at the present moment, and if we keep strictly in view a mere presentation of the facts of practical medicine in a plain and unpretending form, we must agree that the task could not have devolved on one better qualified than Prof. Dunglison. Such a work, however, executed in the best possible manner, and all this we concede to the one under consideration, is one of labor but not of genius. It is written for the present, but not for future generations—it will cause the author to float buoyantly on the tide of present popularity, but not down that stream which finds its way through unexplored regions into the ocean of eternity.

These remarks, the learned author will not believe, are made in a spirit of complaint, for he gives us to understand, in his preface, that he looks for no such destiny; he says: "In regard to the execution of the work, the author would merely remark, that he has endeavored to give a faithful exposition of what he considered to be the existing views in relation to the subjects of which it treats. He is not conscious of possessing any exclusive opinions;

and has endeavored to be essentially eclectic." In the achievement of these objects, he has been completely successful, and having accomplished all that he proposed, we should be not only satisfied with, but grateful to him. Considering the task he undertook to perform, and the manner in which it has been executed, we without hesitation, recommend it to our readers as the best exposition of the present state of practical medicine, that has been written in the United States.

Professor Dunglison says he has "endeavored to be essentially eclectic," and with this we are not only pleased, but we would be much gratified to find other writers and teachers adopting the same sentiments and pursuing the same course. To do so, would be a renunciation of all systems of medicine, and the first indispensable step towards the establishment of true therapeutical principles. In this cause we have been laboring for several years, and were we to assert that we were the first in the United States, that openly avowed a preference for medical eclectism, and publicly advocated its superiority over all other modes of cultivating medical science, we do not know that we should be doing any one injustice.* Up to this moment we are not aware that it has been, on this side of the Atlantic, formally defended by any other individual, and yet we meet with frequent indications that it is secretly and silently finding its way into the good opinion of very many able and zealous cultivators of the science.

In 1835, when we began to teach medical eclectism, systems of medicine were popular in the United States—*Physiologism* in the Northern and Eastern, and *Vanacavaism* in the Western and Southern States. Now, however, the condition of things is very different. The profession is as incredulous in regard to the former, as it is infidel in relation to the latter. By the enlightened, both have been denounced as gratuitous and unfounded, and it is to be hoped that the disastrous experience of the past will teach us how to act with discretion for the future.

Though it must be admitted that the profession looks at all systems with much greater distrust now than it did a few years

*An Inaugural Discourse on Medical Eclectism. By James C. Cross, M. D., Professor of Materia Medica, in the Medical College of Ohio, &c. &c. Published at the request of the Medical Class. Cincinnati: Hendale & Henry, 1835.

since, we would not be understood to intimate that our humble exertions have been the cause of or have contributed, in any sensible degree, to bring about the change to which we have alluded. We only claim to have commenced very early to point out the inability of systems to advance the science, and to have continued without interruption, on every suitable occasion, the same line of conduct, and trust we shall not slacken in our zeal until they are utterly exterminated. They are great barriers to improvement, and should—nay, they must be removed.

In the work before us, the student will find not what was the state of medicine, some ten or twenty years ago, but what it is at the present period—in it will be found an account of all the latest pathological improvements and therapeutical changes that have been made, and to no work can he refer in which he will meet, *in a small compass*, with so large an amount of information that will be useful to him in actual practice. It is, strictly speaking, a compilation, and it is to be regreted, that one who knows so well how to appreciate the value of permanent reputation, and is so well qualified to win it, should not prefer it to the ephemeral notoriety, that results from collecting and collating the opinions and practices of others. This is of value certainly, but it a task that may be performed, and that well, by an individual not very remarkable for acuteness or comprehensiveness of intellect—learning and labor are all that is necessary. It calls not into activity those higher faculties of the mind, that are employed in trains of consecutive thought, or in profound philiosophical deductions. In confining himself to so humble a sphere of usefulness, Professor Dunglison gives evidence of modesty, but he does himself injustice. We are much mistaken in the estimate we have formed of his intellectual character, if he is not fitted for such achievements, as would give him a much more elevated rank than he can ever acquire as a compiler of books.

Dr. Paine's Answer to Circular Letters by Drs. Carpenter and Forbes. From the Boston Med. and Surg. Journal.

We were not requested, nor did we notice, although we read

with care, the "Circular Letters" of Drs. Carpenter and Forbes, in vindication of the former against a charge of plagiarism, preferred by Professor Paine, of New York, and consequently, it would be doing the former injustice, to say more of the answer of the latter, than that he has rendered it abundantly evident that the defence of Drs. Carpenter and Forbes, is far from being conclusive or satisfactory.

ANNUAL ANNOUNCEMENT of the Medical Department of Transylvania University, containing the Circular for the ensuing Session, and the Catalogue of Pupils and of the Graduating Class, for 1841–2.

From this announcement, it appears that the Medical Department of Transylvania University is in a flourishing state. The number of Students for 1841—'42, being 271.

Recapitulation.—Kentucky, 116; Tennessee, 33; Alabama, 30; South Carolina, 23; Georgia, 11; Missouri, 11; Mississippi, 9; Indiana, 9; Ohio, 8; Virginia, 7; Illinois, 5; Arkansas, 2; Pennsylvania, 2; Louisiana, 1; North Carolina, 1; Delaware, 1; New York, 1; Michigan, 1.—Total, 271.

☞ We notice with pleasure, the fact, that many of our pupils have adopted the laudable plan of attending three courses of lectures. In the present catalogue we have a considerable number of such individuals, who, having complied with the rules of the Institution, could have been candidates for examination in reference to the degree of Doctor of Medicine. They have preferred to wait another year and reap the advantages of an additional course of instruction.

CATALOGUE OF GRADUATES—1842.

At a public commencement, held in the Chapel of Morrison College, Transylvania University, on Wednesday, March 9th, the Degree of Doctor of Medicine was conferred on the following gentlemen, who had undergone the usual examinations, having

having previously submitted Theses' on the subjects annexed to their names:

Adàir, Wm W	of Ala.,	on Dysmenorrhœa.
Anderson, Monroe W	Tennnessee,	Dyspepsia.
Baldwin, Aaron	Alabama,	Puerperal Fever.
Ballard, Wm J	Kentucky,	Inflammation.
Black, Edward H	Do.	Cold bathing in Fevers.
Bowman, Isaac	Do.	Dietetics.
Boyd, Hugh S	S. Carolina,	Scrofula.
Broadwell, S E	Kentucky,	The Bandage.
Brown, John S	Do.	Indigestion.
Browning, A M	Do.	Diseases of Mucous Membranes.
Chew, Joseph	Do.	Signs & disea's of Preg.
Cogely, T J	Ohio,	Fever.
Core, Jesse G	Tennessee,	Variola.
Cullender, George D	Do.	Cholera Infantum.
Dudley, E L	Ohio,	Diseases of the Heart.
Ervin, R H	Alabama,	Gonorrhœa.
Glass, F	Kentucky,	Indigestion.
Hall, John R	Do.	Typhoid Fever.
Hamilton, Oscar F	Do.	Chorea.
Harris, Allen	Tennessee,	Intemperance.
Henderson, Harvey D	Indiana,	Intermittents.
Higbee, D C	Kentucky,	Typhus and Typhoid Fever.
Hornsby, N L	Do.	Physiology of the Eye.
Hornsby, R J	Do.	Internal use of Mercury.
Ingels, Edward	Do.	Dysentery.
Jenkins, Thomas J	S. Carolina,	Pleurisy.
James, Wm E	Mississippi,	Mania.
Little, Robert E	Kentucky,	Climate and diseases of Madison co.
Metts, John A	S. Carolina,	Insanity.
Mitchell, Charles H	Kentucky,	Tabes Mesenterica.
Moore, B W D	Do.	Phys. educa. of females.
Moore, James H	Do.	On the Liver and Bile.
McNees, Wm J	Do.	Scarlatina.
Paazig, Charles Ferd'd*	Ohio,	Treatm't of old Ulcers.
Patterson, John	Tennessee,	Pneumonia.

*German Thesis.

Pinckerton, L L	Kentucky,	Improvem't Med. Sci.
Polk, Edward T	Do.	Indigestion. [1838.
Ramsay, Frank A	Tennessee,	Epidemic of Knoxville,
Rentfro, Erasmus D	Do.	Purulent Opthalmia.
Rush, Lorenzo D, M D‡	Ohio,	Iodine.
Russell, Thomas T	Missouri,	Koino-Miasmata.
Ryley, Alfred A	Kentucky,	Phthisis Pulmonalis.
Scott, John W	Do.	Constitutional effects [of local injuries.
Sebrell, Allen	Virginia,	Diseases of the Liver.
Simpson, Wm M§	Kentucky,	De febre flavo.
Smith, Richard M	Do.	Bronchitis.
Sutton, George C	Do.	Emetics.
Valentine, John S	Alabama,	Bronchitis.
Warren, James M	Kentucky,	Inflammation. [cury.
Warren, Thomas B	Missouri,	Use and abuse of Mer-
Watkins, Joel W	Alabama,	Continued Fever.
Willis, Wm D	Kentucky,	Typhus Fever.
Wright, John	S. Carolina,	Congestive Fever.
Young, Brown	Kentucky,	Circulation of the [Blood.
Young, John R	Tennessee,	Regimen.

At the same time, the Honorary Degree of M. D., was conferred on the following gentlemen, viz:

Drs. Edward Deloney, of Louisiana,
William Carr Lane, of Missouri.

CIRCULAR EXTRA

Of the Medical Department of Transylvania University.

Various publications having been made, touching a difficulty that occurred last winter between a Professor and a Pupil, calculated to make the impression that the medical faculty was in a state of incipient disorganization, and likely to experience an actual disruption, it is due to the institution, and ourselves to affirm, as we now do, most explicitly, that the reports referred to are destitute of foundation; that the prospects of the school are

‡Received the degree of M.D., last year, from the University of Pennsylvania.

§Latin Thesis.

shown to be highly flattering, by the catalogue recently issued and which might of itself be a sufficient refutation of the slander; and that there is no prospect, so far as we are aware of, that any event is likely to effect the organization of the school, or to interfere with its future successful operations.

By order of the Faculty,

THOMAS D. MITCHELL, *Dean.*

MEDICAL HALL, LEXINGTON, KY., March, 14th, 1842.

From the Lexington Intelligencer.

TO THE PUBLIC.

It is generally known that an unfortunate difficulty occurred during last winter, between Professor CROSS and one of the pupils, which has been exaggerated and misrepresented in every shape and form in numerous public prints, all acting to the prejudice of the former. Now, in this matter the Medical Class took an active and zealous part, and, as at least four-fifths of it were his decided and determined friends, and sustained him throughout, we, a small number, still remaining in Lexington, regard what has been said in the public journals as calculated, not only to prejudice the public against him, but to reflect upon those who stood by him during the whole difficulty, consider it due to Professor Cross and to our absent classmates, that a plain statement of facts should be made, that the public may be enabled to judge how far the Class considered his conduct blameable.

In order to express their indignation at the manner in which he had been treated, and their undiminished respect for him as a man and great admiration for him as a teacher, not less than four-fifths of the whole Class met and passed a series of resolutions, which are now in possession of Prof. Cross, but which are withheld, for the present, from the public, at his particular request, all of which speak of his conduct as a gentleman, of his attainments as a scholar, and of his abilities as a teacher, in terms of the highest praise and admiration. These resolutions, should they ever see the light, will satisfy all in what manner the students regarded his conduct.

That Professor Cross' conduct in the conflict with Mr. H., could in any way be interpreted to his prejudice, we unhesitatingly deny, not only on the authority of Mr. James Lowry, who witnessed the whole of it, and whose written statement we have, but upon that of all those who profess to know personally anything about it.

The truth of the above statement is undeniable, as almost every individual in Lexington is perfectly aware, and in giving it to the public, we deem it nothing more than an act of justice to an individual who has been slandered and abused, and for whom we entertain the highest respect as a man and a teacher.

J. A. METTS, M. D., S. Carolina.
A. SEBRELL, M. D., Virginia.
J. S. VALENTINE, M. D., S. Carolina.
W. E. JONES, M. D., Mississippi.
ISAAC BOWMAN, M. D., Kentucky.
T. J. JENKINS, M. D., S. Carolina.
AARON BALDWIN, M. D., Alabama.
JOHN WRIGHT, M. D., S. Carolina.

The Editor trusts that those Journals that have made statements in regard to the difficulty above alluded to, which are calculated to prejudice him in the estimation of the public, as well as the Institution in which he is a teacher, will give the "Circular Extra" and the address "To the Public," such publicity as a sense of justice dictates.

MONTHLY PERISCOPE.

Acute Larnygitis, with remarks on Bronchotomy. By JORDAN ROCHE LYNCH, M. D.

So ineffectual have all the modes of medication that have been proposed for the cure of this dreadful disease proved, that we cannot recommend in too strong terms the remarks of Dr. Lynch, on the operation of bronchotomy, to the attentive consideration of the practitioner.

"The prognosis is always unfavorable. Dr. Cheyne considered it the most fatal of all inflammations. The only hope is by giving relief by

the operation. Upon this point there is great difference among medical authorities. Dr. Baillie was of opinion that blood-letting is of no use, and that tracheotomy should not be resorted to in less than thirty hours. In this case death put an end to the patient's sufferings in less than that time. Dr. Armstrong mentions two cases that terminated fatally in seven and eight hours. Mr. Lawrence says, "that bronchotomy should be done as soon as the symptoms enable us to decide upon the nature of the disease;" and wisely makes the condition of the sufferer more the criterion than the period of the attack. Louis observes, that as long as bronchotomy is considered an extreme measure, it will be performed too late. Drs. Macintosh and Elliotson are in favor of the operation, but recommend previous trial of venesection and mercury. This is very good advice in the first stage, before effusion has taken place.

In such a fell and insidious disease, when the sentinel of the portal of life is being overpowered, delay is death; and most assuredly the danger from the operation cannot be compared with the danger from the obstruction to the breathing which it is calculated to remove: it is of no use whatsoever to have recourse to it when the face becomes livid, and the faculties obtuse, from the circulation of black blood in the brain.

The operation of bronchotomy is less likely to add to the irritation, than that recommended between the thyroid and cricoid cartilages; it is also of a more simple nature: it is likewise further removed from the seat of inflammation, and the mucous membrane is here endued with less sensibility.

Some time ago, in a case in some respects similar to this just detailed, I cut down in the early stage upon the trachea in the manner described by Mr. Lawrence in his lectures, and introduced a very short canula nearly approximating to the shape of that of M. Bretonneau (a description of which is given in the 25th plate, figure 4, of M Bourgery;) and persevered with calomel and opium, and the application of leeches to the fauces; and although the canula caused great irritation, the opening closed about the eighteenth day, and the man recovered.

In every case, as soon as the disease has fully manifested itself, bronchotomy should be performed, or an excision of one or two of the rings of the trachea, as described by Crampton. The tenderness of the larynx, and the peculiar inspiration quite distinct from the hoarseness that often accompanies severe bronchitis, and which is caused by mucous or catarrhal inflammation, are the two pathognomonic signs which justify the use of the knife, and afford to your patient the only certain means of saving his life. Medical men are, by their exposure to vicissitudes of temperature, peculiarly liable to this complaint, several of the greatest eminence have died of it; they should be always mindful of the saying of an old and great authority—"Celerrime intereunt, cynanche laryngea laborantes nonnunquam et antiquam medicum accersiverent."—*Medical Examiner.—From the London Lancet*, Nov. 27, 1841.

On the Treatment of Old Fractures by Division of the Tendons. By Dr. Dieffenbach.—Dieffenbach has several times in old cases of fracture of the patella or the olecranon, where the portions were dragged

far apart, divided the adjacent tendons so as to be able to bring the portions together and, by friction of them one upon the other, to excite such action as might end in the formation of a shorter and firmer bond of union. In some cases considerable benefit was obtained after all other means had failed; in others the result was negative. Two examples are detailed; in one, an old ununited fracture of the ulna, he divided the tendon of the triceps, fixed the upper portion of the bone in its right place by a bandage. and every fourteen days rubbed it well against the lower one: in three months the union was firm. In another example, an old distantly united fracture of the patella, he divided the ligamentum patellæ and the rectus femoris about three inches above the patella; then, by an appropriate bandage and constantly drawing the separated portions more closely together, he obtained at the end of some months a complete hardening of the interposed substance, and a considerable amelioration of the patient's state. —*New York Medical Gazette.—From British and Foreign Medical Review, from Casper's Wochenschrift.*

Absence of the Uterus.—Reported by Dr. Cramer, in the Medicinische Zeitung. August, 1841.

The case here related is that of a woman, thirty years old, of perfectly feminine external form, who had never menstruated but had frequently suffered from epistaxis, hœmoptysis, and other signs of local congestions. She married at 23, and at 30, annoyed at having no children submitted to an examination. No uterus could be found, but the external organs of generation were well formed, and the vagina was of normal width, as long as the finger, and ended in a cul-de-sac. The unusual circumstances of the case were, the existence of natural sexual appetite, and of a tendency to vicarious menstruation, the normal developement of the external sexual characters, and the nearly full size of the vagina; all rendering it probable that, though the uterus was deficient, ovaries were in their natural state.—*New York Medical Gazette, from British and Foreign Medical Review, Jan.* 1842.

Medical Memoranda.—A very fatal disorder, called the black fever, has recently made sad ravages among the rural population, near Akendale, in Yorkshire, England.———Much sickness has been suffered at Macao—which was a kind of influenza, that carried off the Chinese as well as Europeans.———*Employment of Hydrated peroxide of Iron, as an antidote to the poison of Scheele's Green.*—A child, three years old, having licked a shell full of Scheele's, green, (arsenite of copper,) experienced very soon violent vomiting, diarrhœa, pains in the belly, and an insatiable thirst.—

They gave to it first cold water, and very soon after 15 grammes of hydrated peroxide of iron, dissolved in cold water, it took four doses. An hour after the employment of this antidote the vomiting and diarrhœa had ceased, in the same time the pains and thirst. The next day all the symptoms of poison had disappeared.—*Journal of Pharmacy.*———*Poison.*—The Knoxville (Tennessee) Post mentions a singular case, in which a man and his two sons were severely poisoned by inhaling the smoke of a coal-pit. The two sons became insane, and fell upon the ground—violent convulsions followed—their tongues were swollen to a great size and protruded beyond their mouths—the eyes started from their sockets, and remained for some time fixed, immovable, and soon the joints of the whole system became stiff. By proper treatment they were recovered, after some twelve hours of speechless suffering.—*N. Y. Med. Gazette.*———A Quarterly Journal of Medical Science is about being established in Boston.———The Medical doings in Cortland county, New York, seem to be any thing but creditable to those who are attempting to destroy the character and standing of Dr. Shipman. We say again, that Dr. Shipman deserves credit for saving the leg of Smith.———Vesalius remarks that lean persons, in whom the abdomen is prominent and the lumbar region depressed, are often found to have but one kidney placed transversely across the vertebral column; and M. Rayer thinks that he has been able, during the life of the patients, to confirm the truth of this statement in more than one case. He adds that this peculiarity of the kidneys ought to be kept in mind by the physician, as the swelling caused by the irregularity of their position has been mistaken for a morbid tumor in the abdomen.———In Dunglison's *Med. Library*, we find six cases of Diarrhœa that were treated by monesiæ and four of them with success. To adults the ext. monesiæ was given in doses of from five to eight grains, three or four times a day.———The second annual public Commencement of the Baltimore College of Dental Surgery, was held on the evening of Friday, February 18th, 1842. The Degree of Doctor of Dental Surgery, was conferred on three individuals. Professor Handy delivered the valedictory address, which has been published, and it is creditable to the author.———M. Amusat lately extirpated a fibrous tumor, the size of an ostrich egg, which was imbedded in the uterine wall. Instead

of being cut out by the knife it was dug out by the finger nails, and yet the patient survived.———The Naval Medical Board recently in session at Philadelphia, passed the following gentlemen for appointment as assistant surgeons, Morris B. Beck, of Virginia; J. Francis Tuckerman, of Massachusetts; Lewis J. Williams, of North Carolina, and Marius Duvall, of Maryland. Assistant Surgeon Wedderburn was passed for promotion. We understand that a number of applicants for examination have been rejected owing to their want of *primary* English education. That a lamentable deficiency does exist, no one can doubt; the *explosions* of the last few years and the consequent stagnation of active occupations, has driven back upon the professions, many whose early education was any thing but a fit preparation for a professional career—the fact is that gentlemen wishing to study medicine should be required to undergo a preliminary examination before being admitted to the schools, or as is the case in the State of Connecticut, favor should be shown to those who have a collegiate education; *there* Bachelors of Arts are admitted to examination for the degree of M. D. after two years study; others after three years. In this State the law recognizes no such distinction among students of medicine, but does recognize it among students of law.—*N. Y. Med. Gazette.*—In this State the professions stand upon the broad platform of democratic equality. Distinctions of all kinds, except pecuniary, are considered anti-republican and odious.

To Correspondents.—We appreciate the compliment which Dr. B. F. Russell, of Indiana, has paid us, in conferring our humble name upon his son, and trust he will assure the young gentleman that we shall take a paternal interest in his prosperity. Dr. Russell has our thanks for the interest he takes in our Journal, and we inform him he may send us such names as he may think fit, and on the terms he that has indicated.———In the present number is an article on Interstitial Absorption, designed to be introductory to a series, in which will be found the substance of our lectures on the Biliary Secretion, Stools and Mercury. We hope and believe we shall be able to comprise the whole in the first volume of this Journal.

THE

WESTERN AND SOUTHERN MEDICAL RECORDER.

EDITED BY JAMES CONQUEST CROSS, M. D.

Professor of the Institutes of Medicine and Medical Jurisprudence in Transylvania University, and late Professor of Materia Medica and Therapeutics in the Medical College of Ohio.

No. 7. LEXINGTON, KY. MAY, 1842. Vol. 1.

THOUGHTS ON THE BILIARY SECRETION.

BY THE EDITOR.

Having in a previous article, endeavored to prove that the refuse matter of the body is removed not by what are called lymphatics, but by veins, or absorbant vessels that terminate in them: we now proceed to illustrate and explain the source and use of bile. The former, if our conjecture is true, will be found in the effete matter of the system, and the latter to consist in ridding it of that which would prove prejudicial, if retained:—the liver is, therefore, a depuratory organ, and its secretion is exclusively excremential in character.

While many physiologists have contended, with more or less of plausibility, that bile is formed from venous blood, and that it is. wholly or in part, an excretion, we are not aware that any one has attempted to show that the elements of bile consist of effete or refuse matter. That it is an excretion, was admitted by the older physiologists, and this opinion has been entertained by various individuals, in modern times, who have hinted at or formally avowed and defended it, but not upon such grounds as to command any thing like a general assent to the doctrine. The more prevalent opinion is that it is, recremential, and is con-

cerned in some way in the process of chylification, while it participates more or less in the performance of some other minor offices.

The function of the liver, whatever it may be, we regard as of fundamental physiological, pathological and therapeutical importance, especially in reference to the nature and cure of acute abdominal affections, and although we do not expect to throw so much light on the subject, as to make it clear to all minds, we believe we shall be able to render it less obscure than it is at present, and that the indulgent reader will not consider us presumptuous in endeavoring to do so.

The vena portarum is the principal vein of the liver, and is formed by veins that return the blood from the abdominal viscera and it presents the peculiarity of ramifying through a gland, before its blood is emptied into the general circulation. The hepatic artery carries red blood to the liver, from which it is presumed, that organ derives its nourishment. The hepatic veins return the blood of the vessels of which we have just spoken, to the general circulation. In regard to the vessels that enter and those which come out of the liver there is a striking peculiarity, that should be particularly noticed; which is, that the former are larger than the latter, and circulate more blood. This is not the case in regard to the other organs;—those that return the blood from them are always larger than those that carry it to them. This is an important anatomical peculiarity, and it will assist us in understanding the facility with which, under certain circumstances, the liver becomes diseased.

The researches of Mr. Kiernan in regard to the intimate structure of the liver, are more complete and satisfactory than those of any other anatomist, and therefore, we shall give his general conclusions. He regards the hepatic artery as destined exclusively to furnish nourishment to the liver, as it has no direct connexions, except with the branches of the vena portæ, after its own blood has become venalized. He describes the lobules of which the liver is composed, as consisting of a central vein, which he styles intralobular, and which constitutes one of the hepatic veins, the office of which is to carry off the blood after the bile has been separated from it. Hence, we have four systems of vessels in the lobule, those of the portal veins, of the hepatic veins, of the hepatic arteries, and of the biliary ducts. The portal vein forms a

plexus in the lobule, from which the bile is separated, and the remainder of the blood is there received into the hepatic vein. The lobule is enclosed in a cellular capsule, on which the portal vein, the hepatic artery, and the hepatic duct ramify; the hepatic vein is in the interior of the lobule.

In regard to these systems of vessels, it is said by Cruveilhier, that whether we inject, with a sufficiently fine fluid, the hepatic artery, vena portæ or hepatic vein, we shall see that there will not be a single lobule into which the injection will not have penetrated. That the injection thrown into eit' er of the vessels just mentioned will pass into one, two or three of the other orders of vessels, and that with a facility which proves that the communication takes place through direct anastomoses, and not through the intermedium of cells.

Having now dwelt as fully on the intimate anatomical structure of the liver, as is necessary to enable us to be understood, we beg leave to state the following propositions the truth of which we trust we shall be able to prove. First. the blood of the arteries is different from that of the veins. Second: the blood of the vena portarum and its tributaries, is different from that found in the other veins. Third: the elements of bile are found chiefly, if not exclusively, in portal blood. Fourth: portal blood is different from that found in the hepatic vein. Fifth: bile is less vital than the recrementitial secretions. Sixth: bile is not concerned in the process of chylification. Seventh: the periestaltic action of the bowels is in no way dependant on bile. Eighth: bile is an excretion and the liver consequently a depuratory organ.

The first proposition, that arterial differs from venous blood, is admitted, and we might safely rest satisfied with its mere statement, were it not necessary to place before the reader several familiar facts, to which we shall have occasion to refer subsequently. In general terms, we, therefore, say, arterial blood is red and venous is black; that the former contains more fibrin and coagulates more readily and firmly than the latter; that it is of a higher temperature, has a greater capacity for caloric, is of less specific gravity, contains more oxygen and less carbonic acid.

Second. *The blood of the vena portarum and its tributaries, is different from that found in the other veins.*

We have said that the conversion of arterial into venous blood is owing to the admixture of effete matter with the former in the general capillary system; therefore, if bile is, as we allege, formed out of this matter it is manifest that it should impart such peculiarities to the blood of the vena portæ, as to enable us to distinguish it from that which is found circulating in the other veins. This is an *a priori* conclusion, and let us see if the facts on the subject justify and sustain it.

Although the results of the experiments and observations that have been made in relation to the blood of the vena portæ are not so conclusive as we would desire, it is not to be supposed that a very considerable degree of study has not been bestowed upon the subject. Indeed, amongst the older writers it was an object of attention, for they have left various statements on record, which show that they considered portal different from other venous blood. Thus, by Van Swieten, it is said, that it is more disposed to run into putrefaction than other blood; by Hunauld, that it has a bilious character, a peculiarity which distinguishes it from other venous blood, and prepares it for the secretion of bile—the formation of which commences in the splenic and mesenteric veins; by Portal, that it is charged with bitter and inflammable principles; by Merat, that he has frequently seen it of a deeper black color, more tenacious and inspissated than other venous blood, and sometimes even resembling liquid fat.

It is stated by Dumas that "the blood of the vena portarum has a nature and qualities conformable to those of bile; it is certain, that it contains the constituent elements of this liquid, more abundantly and better developed than that in the other vessels. It has been found charged with adipose and fatty principles and already impregnated with a certain portion of bile. But there is nothing similar observed in the hepatic artery, where the blood does not seem to differ from that in the arteries of the stomach, intestines, and in the whole of the arterial system."

There is a peculiar substance, which was first discovered by Rouelle, and denominated by Thenard, osmazome, which is found accordingly Gsell, Gmelin and Wienholt in most of the solids and fluids of the body. This substance, says Wienholt, exists in greater abundance in the blood of the vena portæ, than in that of any other vessel in the economy.

By Shultz, is said, that the blood of the vena portæ is of a darker, blacker tint than other venous blood, and the dark color is most evident in animals that have fasted,*—that neither neutral salts, nor the action of the air has the effect of rendering it of a brighter red color—that its coagulum is less firm—that it contains less fibrin and albumen, but more fatty matter than other blood. In his experiments, it was further ascertained, that the dried serum of the portal blood was of an ash-gray color; that of venous blood of yellow-gray; and that of arterial blood yellow; the dried cruor of portal blood was of a dirty gray brown; that of venous blood dark red; that of arterial blood deep red. The solid constituent parts of portal blood contained, in general, nearly twice as much *fatty matter* as those of arterial and venous blood, more especially the dry fibrin of portal blood, contained more than five times as much fatty matter as that of arterial blood.

The solicitude of physiologists to discover the apparently inscrutable nature of the function of the spleen, has caused them to dedicate a very close attention to all that concerns that organ, and consequently, much has been learned in regard to the blood of the splenic vein. Indeed, on this subject, the results of observation are no less diversified than they are accurate and conclusive. From the experiments of Bohnius, Meckel, Roloff, Senac, and many others, it appears that it is more fluid, aqueous, and less consistent than other venous blood. By Van Swieten, it is said that "the blood going from the spleen to the liver, by the splenic vein, is extremely thin and dissolved; and the venous blood from the omentum contains in it much more of the dewy moisture absorbed from the cavity of the abdomen, into which it is exhaled from the arteries: From all which the reason appears, why the blood of the vena portarum is so thin and dilute, notwithstanding it is now become venous, after having lost much by the arterial secretions; for, every thing duly considered, this blood seems to return with more thin juices, to the liver, than it first carried when

* Why should portal blood be darker in fasting than in feeding animals? The reason is obvious. During fasting, the volume of fluid circulating in the blood-vessels is diminished, and as a consequence, the the activity of interstitial absorption is increased. In a given time, therefore, more refuse matter is admixed with a less quantity of blood than takes place under ordinary circumstances.

it was arterial." By Haller, it is said, that the blood of the mesenteric veins contains a larger amount of adipose matter, "which imparts to it so great a degree of viscidity, that the blood of the vena portarum would be apt to concrete but for the more fluid and aqueous blood of the splenic vein," which is more albuminous and less fibrinous than other blood. More recently, it has been ascertained by Douglas, that there is a difference in the weight of the serum of the jugular and splenic veins. An equal quantity of blood taken from those vessels was allowed to coagulate, and then it was ascertained that the serum of the former weighed twelve drachms and eighteen grains, and that of the latter thirteen drachms and one scruple. He also found that there is less fibrin in the blood of the former than in that of the latter. By Vanquelin, we are told, that there is less fibrin and coloring matter, and more albumen in the blood of the splenic vein than in other blood. By Senac, Roloff, Hartman and Haller, it is said, that it will not coagulate, and by Abanethy, that it does not do so like that of the other veins. By Autenrith, it is remarked, that its blood has peculiar characters, by which it is easily distinguishable from other blood.

Of the same import is the testimony of Chandrieu. He tells us that the contents of the great and small intestines of the horse are generally mixed with a considerable amount of fluid, which is absorbed in proportion as it flows along the intestinal canal; and on examining the venous blood of the small intestines, and the fluid collected from the chyliferious vessels, he found that the former had an odor sensibly herbaceous, and resembling that of the contents of the bowels, while the latter was entirely free from it.

The facts now stated are abundantly sufficient to prove not only that portal blood is different from other blood, but that new principles are added to it during its passage through the capillary blood-vessels of the abdominal viscera, for it is utterly impossible to conceive that it could have acquired those peculiarities in those vessels by any process of elaborative action exerted, by them, upon the blood.

The reader cannot fail to have observed that while numerous witnesses testify, in no equivocal terms, to the fact that portal blood is peculiar and different from other venous blood, they exhibit no very striking unanimity of sentiment in regard to what

that peculiarity or difference consists in. That it strikingly differs from other venous blood appears to have been satisfactorily established, and that is sufficient for our present purpose. One single remark, however, we shall venture in explanation of the diversified statements that have been made by different observers. Besides the effete matter which is thrown into the capillary vessels of the abdominal organs, there are many other matters, through the agency of *accidental absorption*, taken up from the stomach and introduced directly into the mesenteric veins. This circumstance is well calculated to give a very diversified character to the contents of the vena portæ. Nor is this permitted without a special object. Foreign substances introduced into the circulation are generally prejudicial, and consequently, they are speedily determined to an emunctory organ through which they are allowed to escape with rapidity from the system, and thus so protect it from the injurious effects which would result from their retention.—Matters which find their way from the intestines into the circulation, do not pass directly from the intestinal veins into the vena cava, but must pass through the liver before they reach the general circulation. In their transit through the liver, their properties must be altered, or, as is more probable, they pass out of the system through that organ, as they do not, according to Majendie, produce the deleterious effects when injected into the portal vein, that invariably result, when they are admixed with the blood of other vessels. Thus, he informs us, that when a gramme of bile, or a considerable quantity of atmospheric air, is injected into the crural vein, immediate death is the consequence; while, if they are injected into the vena portæ, the animal suffers no ill effect. This view of the office of the liver is rendered more plausible, by the fact stated by Christison, that in animals, poisoned by repeated doses of salts of copper, the metal has been traced in the liver after death, although it could not be detected in other parts of the body; from which we would infer, that proving injurious to the economy, it has been instinctively hurried to that organ of the system, the office of which is to purify the blood from any injurious matter that may be introduced into it. It is not likely that this important duty would have been assigned to an organ, the office of which is to separate from the blood a secretion designed to remain in the system for useful purposes.

Third Proposition. *The blood of the vena portarum is different from that of the hepatic vein.*

If bile is formed of effete matter;—if this imparts peculiarities to portal blood, by which we are enabled to distinguish it from other blood; if the liveris a depuratory organ, and causes portal blood to part with some of its distinctive attributes, during its transit through that organ, it is altogether probable, that in passing through it, portal blood experiences such a change as to enable us to distinguish it from that which is found in the vena cava, and which consists in great part, of blood that has circulated through the liver. If, in other words, the liver, like the lungs, purifies the blood from injurious matters with which it is incorporated, we should see, as in the blood which returns from the latter to the heart, some evidence of it in the blood that returns from the former to the vena cava. That such is the fact, the proposition which we have just been considering, seems very clearly to indicate.—We have no reason to believe, that caval differs from venous blood in general, and as it has been shown, that there is obviously, a difference between the latter and portal blood, it follows, as a necessary consequence, that portal and caval blood are not perfectly identical. One of the principal points in which portal blood, and that of the other veins differs, is in respect to color—the former is said, by many observers to be of much darker hue, and to contain according to the doctrine for which we contend, a larger amount of effete or refuse matter. If this contains the elements of bile, and the dark color of portal blood is owing to its presence in it, it is evident, as the bile is separated from the blood in its passage through the liver, the blood must become of a less dark hue. But little attention has been directed, particularly, to this point, and consequently, but few observations or experiments have been made in elucidation of it. Indeed, we are not aware, that it has been a subject of experimental research with any other individual than Dr. Stoker, who remarks;—"Experiments which I instituted more than twenty years ago, with a view to ascertain what was the difference between the state of the blood in the vena portæ, and of that as it enters the vena cava, as it comes from the liver, though rude and incomplete, yet appeared to me to be at least decisive, that in health, blood is of a lighter color after than before its passage through the liver; and further, that on immersing blood of these

different denominations, in separate vessels of water, at a high temperature there was a remarkable portion of solid animal matter, elevated to the surface of the water, in which the blood of the vena cava was immersed, whilst no such appearance presented itself on the water, in the other vessel."

In view of the results of these experiments, and of the observations that have been made in regard to the peculiarities of portal blood, the idea, which we suggest, that the blood of the vena portæ, in circulating through the liver, is exposed to a process of depuration, something like that exerted upon the blood in its passage through the lungs, cannot be considered improbable. And moreover, when we recollect the disparity that subsists between the size of the vessels that enter, and those that come out of the liver, it must be very sensibly strengthened. The former are larger than the latter, doubtless, because more blood enters that organ by the vena portæ and hepatic artery, than returns to the general circulation through the hepatic veins, and consequently, there must be some other outlet; and we know of no other, than that furnished by the biliary ducts, through which the effete matter, or bile, passes into the bowels.

If the office of the liver, in common with that of the lungs, is to purify the blood of its refuse matter, it may be asked, why does not the blood, in passing through the liver, experience a more remarkable change—why is it not as obvious, as that which takes place in lungs? To this question we would respond, that the wonder is not, that the change experienced is not greater, but, that it is so great. The blood of the vena portæ after having furnished the elements of bile, and that of the hepatic artery, after having yielded nourishment to the liver, are received into the capillary ramifications of the hepatic vein, into which, is, also, emptied the effete matter of the liver, which circumstance is, of itself, nearly sufficient, to counteract any depurating action, which may be exerted upon it by the liver. Besides, the liver and the lungs, are very differently situated. In the former, the blood is merely decarbonized, but in the latter, it is decarbonized, and receives oxygen from the air—in the former, the blood that has heen decarbonized is immediately mixed with the refuse matter of the liver, but in the latter, the decarbonized blood is not again mixed with the refuse matter until it reaches the general system, for the effete matter of

the lungs passes into the capillaries interposed between the bronchial arteries and veins, and thus the blood is allowed to return to the left side of the heart, purified in a great degree, from refuse matter, by the joint agency of the liver and the lungs.

Fourth. *It is from the portal blood that bile is formed.*

Much difference of opinion prevails amongst physiologists, as to the kind of blood from which bile is derived. By the majority, it is ascribed to the portal blood, but there are those, such as Bichat and Broussais, who think that it comes from the blood of the hepatic artery, and, there are others, such as Magendie and Alison, who allege, that it is furnished equally by venous and arterial blood. Upon this subject, we think it strange there should be a difference of opinion. It is true, that the other secretions, whether excrementitial or recrementitial, are furnished, as far as we know, by arterial blood, and consequently, the presumption is at once entertained, that the biliary secretion is not an exception. It should be recollected, however, that the vena portæ, in its arrangement and structure, is not like common veins, but in these respects, is strikingly resembant of an artery, and therefore, in all probability, performs an office analogous to those that are usually assigned to arteries. We can see no other motive for the peculiarities, by which it is distinguished. There are but two organs in the animal economy, to which two kinds of blood are sent. These are the lungs and liver, and in regard to the former, it is evident that one kind would not be sufficient to enable them to perform the functions that are dependant upon them. Blood is sent to them for the purpose of being arterialized, and blood of a different character to nourish them. One kind to be freed of its impurities, and another kind, already in a state which fits it to maintain the physical structure of the organs. Now, the object of this arrangement of the vascular systems of the lungs, is perfectly intelligible, and yet, it is not in any respect, different from the vascular systems of the liver. Two kinds of blood are sent to the liver, for precisely the same purposes that they are sent to the lungs.—That through the vena portæ, to furnish bile, and thus free the blood from effete matter, and that through the hepatic artery, to nourish the organ. The nourishment of the liver cannot be ascribed to portal blood, for that would be wholly inconsistent with a fundamental principle of nutrition, which is, that the nourishing fluid must

be always furnished by arterial blood. If we maintain that bile is a product of the blood of the hepatic artery, we shall be entirely unable to understand the purpose to be answered by the vena portæ,—it would, in that view of the subject, be altogether useless. Again, in objecting to the office ascribed to the hepatic artery, we should not omit to notice its extreme smallness, when compared to the great volume of the liver. In this respect, there are few organs for the nourishment of which there is, apparently, so imperfect, we will not say insufficient, provision made. Compare the hepatic artery with the vessels that go to the kidney, muscles and even the bones, and it will be found to be of smaller volume, in comparison to the liver, than the vessels which nourish the organs just mentioned. The size, therefore, of this vessel is, of itself, sufficient to refute the idea that its blood yields nourishment to the liver, and also, the elements of the biliary secretion.

Independently of these considerations, which are sufficient to render every other supposition, than that which derives the bile from venous blood improbable, the question seems to have been, in a good degree, settled by the experiments of Malpighi and of Simon. They ascertained that tying the hepatic artery in different warm-blooded animals, had little or no effect on the secretion of bile, but that it was suppressed by tying the vena portæ. It may not be improper to remark, that the only other instance of venous blood going to a gland, is the case of those animals where large veins enter and are dispersed through the kidneys, and where, consequently, any thing that escapes from them must be immediately excreted.

Although the most rational conclusion, which these facts seem to authorize is, that the bile is formed from venous blood, it may occur to some, that the case of Mr. Abernethy, in which the vena portæ did not enter the liver but terminated in the inferior vena cava, nearly on a line with the renal veins, renders it doubtful. It should, however, be recollected, that in this case, the hepatic artery was one-third larger than usual, evidently suggesting the idea, that it was in the performance of some unusual office. Besides the umbilical vein was still pervious, and branched out into the substance of the liver. It is possible, therefore, that the arterial blood, after having nourished the liver, was poured into the branches of the umbilical vein, just as in the normal condition,

it is poured into the portal vein; and the secretion of bile, therefore, might still have been derived from venous blood.

Whether this was the case or not, must be left to conjecture; but even if it was not so in the case of Mr. Abernethy, and that of Mr. Wilson, which was somewhat analogous to it, they would only go to show that the elements of bile, may, under certain circumstances, be produced from arterial blood, but not that it ordinarily furnishes them. In view of the source of bile, for which we contend, these malformations must be regarded as merely apparent, not real objections to the opinion that maintains that the biliary secretions is formed from portal blood.

Fifth. *Bile is less vital than the recrementitial secretions.*

This conclusion is fairly deducible from the following facts. First;—bile is formed from venous, which is less vital than arterial blood, as is proved by the former containing more carbon, less fibrin, and coagulating less readily and firmly, than the latter. Secondly;—portal is less vital than other venous blood, and for the same reasons: it contains more carbon, less fibrin, and coagulates less firmly, than the latter. As effects partake more or less of the qualities of their causes, the products formed from portal blood must exhibit more or less of its character; therefore, as the other secretions are formed from arterial, which is more vital than venous blood, they must be more vital than the biliary secretion.

We would, therefore, suppose that the septic tendency, in venous must be stronger than it is in arterial blood, and this appears to be the case in regard to that of the vena portæ in particular. By Van Swieten it is said, that it is more inclined to putrefaction, than any other blood; and by Maclung, that the wisdom of nature is envinced in procuring bile from "that blood in which the septic animal process may reasonably be supposed the farthest advanced. She does not employ here, as in the other secretions, arterial, but venous blood; returning, too, from parts, where fermentations, the nearest putrid, are continually going on; effused and stagnating, perhaps, in the spleen; and spread out afterwards, through the sluggish system of the *vena portarum.*" In another place, the same author remarks, "that whatever accellerates the septic animal process, has a tendency to increase the Biliary Secretion; since it favors that change of the blood which fits it for becoming bile." In support of the idea,

that blood, in which the septic tendency is strong, and vitality weak, is best fitted for the formation of bile, it should be stated, that bile, according to John Bell, may be imitated by keeping putrid blood.

Proceeding from blood in which the septic tendency is strong, it is reasonable to conclude, that bile must exhibit it, also, to a greater or less extent, and this appears to have been an old opinion. It was that held by Boerhaave, and others, who says that "bile is known to be one of the sharpest and most lixival juices inhabiting the body, very speedily putrefying." In another place, he states, that "there is no substance in the human body, that putrefies sooner, or to a greater degree, than bile; nor was that juice ever found to turn acid; but upon standing some time in a warm place, it presently turns rank, and putrid of its own accord, and smells intolerably; but after standing a considerable time, it contracts a smell of ambergrease." Bile, we are told by Van Swieten, "is of all the humors of the body, the most inclined to putrefaction; and in dead bodies, we observe that putrefaction commonly begins to show itself first about the liver." Hallar quotes an experiment from Gaber, to prove that bile "will stink in a cold place, within two hours after death," and further remarks, in commenting on the experiments that have been performed on bile, that they should not be confided in, as the results that have been procured are merely the effects of putrefaction. More recently, we are informed by M. Thenard, that the yellow matter of bile imparts to it a putrefactive tendency, and this exists in a direct ratio to the quantity of yellow coloring matter which it contains.

The bile, says Dr. Rush, appears to undergo a putrefactive process in the gall-bladder. "I infer this," he says, "from the bitterness it acquires during its stagnation in the gall-bladder. The same bitter quality is the offspring of the putrefaction of certain vegetables, and of some animal substances. It probably takes place in other secretions of the body. Dr. Darwon ascribes the bitter taste we often perceive upon the tongue, to a morbid change in the quality of the liquor, which is secreted upon its surface; and perhaps the bitterness of the wax, which is secreted in the meatus auditorius is derived from a change induced in it, by its stagnation, similar to that which occurs in the bile. It is true, the bile is less putrescent than the blood, according to an ex

periment made by Dr. Saunders, and since repeated by a graduate in the University of Pennsylvania; but the same indisposition to putrefaction takes place in certain vegetables, after they acquire, by decay, a bitter taste. Of the truth of this remark, I satisfied myself by the following experiment. Into a two ounce phial, I put half an ounce of beef, cut into small pieces, with the same quantity of rotten and bitter part of an apple, and an ounce of water. Into another phial, I shut the same quantity of beef and water, and placed them under the same circumstances of heat. The latter putrefied many hours before the former. Had the rotten part of the apple been exposed alone to heat and air, I have no doubt it would have undergone another putrefaction. The same remark applies to the bile out of the body."

Bitterness is the most prominent characteristic of bile, particularly of that which is found in the gall-bladder, and is, at present ascribed to a principle called picromel; which was discovered by Thenard in the bile of the ox, sheep, cat, dog, and of several birds, and by Chevallier, in that of man. The grounds of this opinion, we cannot understand, when we find it said by Turner, in his *Chemistry*, that "its taste is sweet, without any bitterness," but that when it is "digested with the resin of bile, a portion of the latter is dissolved, and a solution is obtained, which has both a bitter and a sweet taste;" a process, which we have no right to suppose takes place in the animal economy. Of the fact, that it is a distinct principle, and exists in the biliary secretion, precisely in the state in which it has been found, we have no positive proof;—that it is not the result of the processes employed to procure it, we have yet to be satisfied, and until that point is settled, it appears to us, extremely absurd, to acknowledge it as a datum from which we can safely reason. This argument is the more tenable, when we reflect, that chemists do not agree, as to the quantity of it to be found in bile, while some have failed to detect it in any appreciable amount, and Orfila, one of the most distinguished of them, asserts, that it does not exist in human hepatic bile.

Bile in the gall-bladder, is certainly a very different fluid from the secretion that is found in the biliary ducts. In that reservoir, it is found to possess properties very unlike those by which it is characterized, just after it is separated from the blood. In the biliary receptacle, when it has been confined there for a considerable

length of time, it is observed to be of a green, and sometimes even of a black color,—to have a very bitter taste, an offensive smell, a viscid consistence, frequently concreting, sometimes being converted into calculi, and apparently, of a very heterogeneous composition, while that which is found in the biliary ducts, is a thin, yellow, sweetish, inodorous, and in some degree, a homogeneous fluid. Now, the question which immediately suggests itself, is what is the cause of the remarkable differences that are observed between cystic and hepatic bile?

Before answering this question, we would remind the reader, that the blood from which bile is formed, has a strong septic tendency, and that the bile itself, is more disposed to run into putrefactive decomposition, than any product that is formed from the blood. Keeping these facts in view, and regarding hepatic as the standard of good bile, we are disposed to think, that the changes which it subsequently undergoes, until it assumes the character of cystic bile, is owing tothe loss of its conservative principle—to its having escaped from the sphere of vital action, and become subject to those laws that regulate the changes that take place in dead matter.

Taking hepatic as the standard of good bile, and the propriety of this choice, no one can question, we must regard the sensible properties which it acquires by a residence in the gall-bladder, as foreign to its nature, and the result of a process, in which vitality has little or no agency. This must necessarily be a correct view of the subject, for if we were to take cystic bile as the standard, we should be obliged to regard all the changes that bile undergoes, from the moment of its secretion by the liver, until its discharge from the gall-bladder, as so many changes for the better, which would be absurd, for sometimes it is changed into gall-stones, and they would be its most perfect state.

When we reflect that the bitter principle is evolved by putrefaction,—that hepatic bile does not contain it, or if it does, it is in so slight a degree, as to be scarcely sensible, and that in the gall-bladder, where this principle abounds, the bile is removed beyond the sphere of vital action, and placed in those cirumstances that favor its decomposition, it cannot be looked upon as absurd, to maintain that the qualities of cystic bile, are owing, in a great degree, to putrefactive decomposition, and that the longer it remains in

that receptacle, the more sensible they become. This idea is strengthened by various facts. By Dr. Saunders, it is said, that the comparative mildness of hepatic, is converted into the bitterness of cystic bile, by stagnation in the gall-bladder. By Dr. Maclung, we are informed, that "the bitterness of bile, is so far from being diminished, by beginning putrefaction, that it seems even to be augmented by it." This truth is remarkably illustrated by the great acrimony and bitterness of the bile found in the gall-bladders of those that have perished from inanition.

The offensiveness of the alvine evacuations, appears to be owing to the presence of the biliary secretion in the bowels. We allude now, to the odor which they exhale in health, and not to the preternatural offensiveness, by which they are sometimes characterized, which may be the result of gases evolved by the decomposition of the contents of the bowels, or the result of intestinal secretion.

In those diseases, characterized by colorless stools, or that are nearly so, we find as a general rule, that the alvine evacuations are inodorous. This is the case in the various forms of cholera—some of the varieties of diarrhœa, and in dysentery. In jaundice, the bowels are commonly torpid, and their contents are retained for a much longer period than in health, and yet, when evacuated, they have no smell—putrefaction appearing to have made no progress in them. "When I tied," says Dr. Douglas, "the common duct of the animal to ascertain the alone absorption of chyme, three days after, the fæces remaining in this animal, were indurated, earthy, nearly without odor, and when removed from the intestines, had no more tendency to putrefy, than an earth or a metal." In fever, the stools, though dark, often continue for days, in a liquid state, and then they are almost always inodorous, but when they become more consistent, they smell, and this is ascribed, very properly, to the afflux of healthy bile into the bowels, which runs rapidly into decomposition.

In further confirmation of the opinion, that bile has its source in the effete matter of the system, it may be stated, that in the early periods of intra-uterine life, there is scarcely a perceptible difference between arterial and venous blood, and the fluid secreted by the liver is nearly colorless and insipid: then interstitial absorption has not commenced. After the lapse of a few months

the blood assumes a light modena hue, and then the bile begins to be slightly colored, but still it is almost tasteless. During the last months of intra-uterine life, venous blood becomes darker, and the bile in the gall-bladder somewhat bitter. The small quantity and blandness of fœtal bile do not seem difficult of explanation. There is a close connexion between the deposition and consequent absorption of fat, and the secretion of bile. This will be briefly considered, presently, but we may, *en passant*, remark, that according to Dr. Good, "the former is of late formation in the fœtus: scarcely any trace of its existence is discoverable before the fifth month from conception." This corresponds exactly with the period when the sensible properties of the biliary secretion begin to be characteristic.

In inanition, we have already said bile is rapidly, and in great abunbance formed, and it becomes under such circumstances very bitter. During fasting there is great emaciation—the fat disappears first, and rapidly, and this is what has induced many authors to say that in "cases of extreme hunger, or of abstinence from food, fat is re-absorbed, and carried into the blood-vessels to nourish the body," when, in truth, it is carried to the liver to be converted into bile. Besides other considerations, this is supported by the chemical nature of fat and bile. Azote is the characteristic of animalization, and this chemical element is not found in either fat, or bile. The former, evinces so little vital energy, that Hunter does not believe that it possesses "the principle of life," and this we are assured, from the facts already considered, is the case with bile.

It is said by Dumas, that "Il semble qu'il y ait un rapport inverse entre la production de la grasse et celle du sang," and we may add, that the blood and bile exist in a direct ratio. For this reason, those of the pure bilious temperament, never become very corpulent. A sudden augmentation of bile, says Dumas, is an invariable consequence of those emaciations, in which the fat rapidly disappears, and this is so uniformly and obviously the case, that Thouvenel says, that the "liver eats the fat." By Lorry, Thouvenel, Fourcroy, Dumas, and many others, a great similitude has been remarked between fat and bile. From those observers we learn what experience has taught every attentive physician, that they exist in an inverse ratio:—that when the deposition of

fat becomes great and obeisity is the result, the biliary secretion diminishes, and that when the fat is being removed by interstitial absorption, and emaciation produced, the afflux of bile into the bowels is rapid and abundant. They also remarked that the bile that flows during the decline of excessive *embonpoint*, is of a degenerate character. It is the result of a very frequent, diversified and abundant experience, that those cases of fever that do not emaciate, are very obstinate and difficult of cure. Now my attention has been particularly directed to such cases, and I assert from actual observation, that the liver is always in a torpid state—that no improvement ever takes place until the liver is provoked to act; and then emaciation follows.

That bile is an excretion, seems to be clearly indicated by its general resemblance to those products formed from the blood, that are evidently excretory, while it is entirely unlike those that are incretory. The former are always characterised by remarkably sensible properties, by which they may be distinguished, not only from all other fluids, but from each other. Compare the saliva, pacreatic and gastric juices, which are incretory, with the tears, the matter of perspiration, the urine, and the cerumen of the ears, which are excretory, and which, I ask, of those orders of secretions does the bile most resemble? No one can hesitate with which it should be classed.

The useful secretions, those designed to be retained in the system, are always formed from the simplest parts of the blood and are always very simple in their chemical constitution, while the excretions are always very complex, particularly the urine, and this is the character of bile, according to every analysis that has been made of it. The bile sometimes contains twenty-six compound substances, including as many as ten earthy or neutral salts; it is much more complex than the blood, or any other animal fluid; and it is also more variable. When taken from the body after death, it is sometimes, bland and admits of being touched and tasted with impunity; at other times it produces pustulous ulcers, and other evidences of highly irritating qualities; and in some instances acts as a poison. Both in children and adults it has every shade of color, from black to an almost transparent whitish hue; it is sometimes as thick as tar, or even pitch; at other times as fluid as water. Its chemical components are equally variable. It some-

times consists chiefly of water and albumen; at other times the yellow coloring principle, the resin, or the cholesterine, predominates. The same variability is met within the color and consistency of biliary calculi; they may be white, yellow, black—black externally and yellow internally; and they may consist chiefly, of one or another of the numerous component principles of the bile. All these variations occur without our having been able, up to the present time, with all our acumen and industry in pathological research, to associate them, in the most remote degree, with any corresponding conditions of the liver itself."

Now, when we bear in mind the multiplied and discrepant sources from which the vena portæ receives its supplies, we cannot be surprised, that its contents should vary considerably in character or that portal blood should yield a secretion very complex and heterogeneous in its constitution and nature.

In regard to the particular constitution of bile, it is almost impossible to speak with any confidence, so discrepant are the results that have been obtained by different chemists. From their researches, however, we may conclude, that it contains a substance which is analogous to a resin, upon which it is supposed its peculiar characters depend, and which may be obtained in a solid form by evapuation. This solid resinous matter consists almost exclusively of carbon and oxygen—no nitrigen having been found in it. From this substance, two principles have been obtained, which, however, we have no satisfactory assurance, exists in bile in a state corresponding to that in which they have been found by chemists. These are cholesterine and picromel, both of which are capable of assuming a chrystalline form. By M. Gluge it has been stated recently, that the fæces of persons in health, examined immediately after expulsion, present a number of very minute, but distinct, and sometimes perfectly transparent crystals. The bile is supposed to have a great deal to do with the formation of those chrystals, for after death that fluid usually contains chrystals in great numbers.

One of the principles laid down by Dr. Prout, as to the formation of organic compounds is as follows:

"That it appears to be essential to the formation of organic compounds, that the elements composing them should not unite so as to form crystalline substances, and that probably no crystallizable body is capable of constituting a portion of a living organized be-

ing; such products, when they do occur, being either the result of excretion, or of disease, or of some artificial process." It is therefore, not at all unreasonable to conclude, on this ground, that the tendency of some of the principles of bile to assume a crystalline form, is because of their unfitness to serve any useful purpose in the economy.

TO BE CONTINUED.

EXTRAORDINARY PHENOMENON.

BY ELDER JNO. A. GANO, OF BOUNBON COUNTY, KY.*

Having heard much of a singular phenomenon, that presented itself at Leesburg, in the person of a little girl, whose name is PENELOPE STOUT, about thirteen years of age, the daughter of an acquaintance, I concluded to visit her, to satisfy my mind as to the amount of truth there was in the many rumors afloat concerning it. As well as can be recollected, it was on Monday the 22nd of November last, that I visited her. Up to last fall, I had been for about ten years, regularly laboring at Leesburg as a preacher of the Gospel, and with very few exceptions, had become well acquainted with the citizens who resided there: I consider them an intelligent and virtuous community; much more so than the citizens of small villages usually are. The family of Mr. T. H. Stout lived in the place at the time of my first acquaintance there; I have known it ever since, the family is respectable, and the parents I believe are truly pious and would scorn any thing like deception or a mean action. At the time of the visit above mentioned, I discovered, so far as I enquired or conversed with the citizens, before

*This communication we publish at the urgent request of the author —not because of its importance, but because various statements have been made in regard to it, and some feeling involved. Besides as Mr. Gano has put himself to the trouble of studying the case and of arriving at truthful results, we cannot consider it improper to give them to the public. The author has fully fortified himself with witnesses, but as the certificates of all of them would occupy more space than we can spare, we have taken the liberty of curtailing the article of no less than fifty-six; all of which, it is said, are from respectable men.—*Editor.*

I called at Mr. Stout's, but one sentiment of belief, in the reality of the strange occurrence.

On entering the house, I found the little girl apparently well, an interesting child, the picture of artlessness and innocence, and rather sprightly than otherwise. Every facility was afforded me for the satisfactory observation of the phenomenon. She was seated in view of all present, and while her left hand was pendant, her right was held out with the thumb erect; several gentlemen with the members of the family present were seated around or standing by; I got her to change the position of her hand and requested persons several times to relieve her, thinking she was fatigued, for we sat a considerable length of time; again having resumed her first position, my eye caught a very small hair on the end of her thumb—not having seen it grow, I removed it and wiped the thumb with my handkerchief, soon after which, I discovered the end of a small hair presenting itself from the end of the thumb, some little distance from the nail towards the ball; observing it closely, I distinctly saw it grow or lengthen out; the entire length of the hair was not I think, half an inch; when its growth was complete, it stood on the end of the thumb until I took it off. I noticed that the end of the hair which came out last was the finest. I could see no apparent effect whatever produced on the skin; nor did it require the least effort to detach it. She informed me there was no sensation, of which she was conscious, produced by the growth of the hairs, and that she could not tell unless she saw them, that they were coming; that when they had to be drawn out, "they hurt a little." I discovered through her thumb nail, for about one third of its length, an appearance as though a small splinter had been stuck under it and extracted; enquiring as to the cause of this, I was told that Mr. J. Wasson had drawn a large black hair from under her nail, that had grown out several inches and becoming stationary had to be pulled out.

Her parents in conversation, then informed me, that the hairs had been growing out about five weeks, that they came irregularly; that for one entire week in the five none appeared, and at another time none for a day or two: sometimes twenty or more would come out in a day. The hairs they said were of various sizes, lengths and colours, a deep black, red, brown and pure white, with also different shades of these colors; varying in size from the coarse bristle to such as I had seen, and finer; and in length from

one, twenty-six inches, to the shortest and finest visible down, of which there was much produced. They further stated that up to that time, they had seen none grow from any other part than her right thumb, from under the nail, on the end or inside. From her mother I learned, their attention was first drawn to the strange occurrence in the following manner. On Sunday evening about five weeks previous to my visit, she complained occasionally of her right thumb, and said "it felt as though it was asleep, having in it "a twinging sensation." On going to the candle to examine it, she exclaimed, "la! mother if here is'nt a hair growing out of the end of my thumb;" her mother threatened to slap her, if she did not hush talking so foolishly; by this time her cousin, whose attention had been drawn to it, said, "yes aunt, it is the truth; and you can see it growing." That hair grew out to the length of some four or five inches and fell off; and for several weeks the majority of the larger ones that grew out, fell off. Her mother said she disregarded the superstitious conjectures about it, made by many; but being unable to account for it, she had suffered much uneasiness of mind about the child; yet she said that up to that time, her general health seemed good. I was further informed, that she was going to school when this singular growth commenced, and so much was the school interrupted by its occurrence and the frequent visits of persons to see her, she had to be withdrawn, and to the constant interruption of the family and the suspension of its business every day, she was visited by the curious and inquisitive. And however much her parents regretted the misfortune of their daughter, they wished to see visiters gratified, and though their circumstances are ordinary, from principle they would have scorned, to make merchandize of their child's affliction.

Of her visit to Lexington, and the treatment she received while there, we have but little to say. Her parents were persuaded to let her be carried to that place, that by a fair and patient examination, scientific gentlemen might satisfy themselves as to the fact, and then satisfy the public as to its philosophy. All that was charged any gentleman for a knowledge of the fact, was to explain it if he could. Little did they suppose, their daughter was to be viewed by any one as a suspicious character and that there would be more effort to prove her a deceiver, than to ascertain the fact and its true nature. There are, however, among those who

saw her in Lexington, many most honorable exceptions; some indeed who patiently examined and firmly believed, as we are informed. I have recently seen in the Western and Southern Medical Recorder, published in Lexington, a piece "On the growth of hair in extraneous situations," to be found in the fourth number of that work, and as this case is therein referred to, I request all who can, to avail themselves of its perusal. They will there find, more light thrown on this strange affair, than can be obtained in the same number of lines from any other source known to us.

In order properly to ascertain the fact, in this case, the most important article required is *good eyesight*, in an unprejudiced head, and I believe there is enough of this, about Leesburg, to establish a visible fact. I visited the subject of this narrative again on yesterday, (Feb. 23rd.) Her parents informed me, the hairs still continued to grow, and have during the winter thus far; the growth for many weeks past, has not been confined to her right thumb, but the hairs come out on both hands and from both thumbs and fingers, but invariably on the inside, or from the ends, or from under the nails.

She has been recently very ill, the seat of disease appeared to be in the region of the heart and lungs. She suffered much from difficulty of breathing attended with slight spasms. Since her recovery, M. B. Hearne informed me that a glutinous substance came out on the ball of her thumb all over, and when scraped off and taken between the thumb and fore finger, could by gradually separating them, be drawn out to a considerable length without breaking; her father told me that some few days since, a hair grew out about the middle of her forefinger on the inside and not failing off, they attempt so extract it, and finding it more firmly set than usual, they called in several of the citizens to see it, and when finally it was drawn out, it raised the skin before it was loosed.

Soon after my first visit to see her, I addressed a private letter to Elder Thomas M. Allen of Missouri, in which I stated briefly what I had seen and heard about this little girl. There being no impropriety in so doing, he caused to be published in the Columbia newspaper, so much of that letter as related to this matter. He informs me recently that a publication or statement had reached there alledging that the whole affair was a hoax; we know the source from whence this report emanated, and deeply regret the

gross injustice done the little girl and the family, and the violence done to truth and matter of fact. And it is this which now prompts us to present to the public the following statements and the cloud of most respectable and satisfactory testimony which follows.

JNO. ALLEN GANO.

FEBRUARY, 24th 1842.

The undersigned, parents of Penelope Stout, having seen disputed in the public prints, the facts of the extraordinary growth of hairs from the thumb and fingers of our daughter, and feeling that a sense of justice to our own and the character of our child, require a public statement from us, do in the most solemn manner, aver thus publicly and in the sight of God, the truth of the fact, that hairs or something resembling hairs have at divers times, from about the middle of October last until the present time, issued from under the thumb nail, from the ball of the thumb and from her fingers, of different sizes and colors, and that from our knowledge of the circumstances which surround our child, it is utterly impossible that fraud or deception could have been practised by her. Given under our hands this 5th of March, 1842.

(Signed) THOS. H. STOUT.
JANE STOUT.

CYNTHIANA, FEB. 26TH, 1842.

DEAR SIR:

Your letter of the 23rd inst., came duly to hand, and I most cheerfully avail myself of the opportunity thus presented, of disabusing the public mind in regard to the statement of a hoax being practised on the community by Miss Penelope Stout, relative to an extraordinary growth of hair, bristles, &c. from the thumb of her right hand.—During the illness of the late Doctor Corlis, who resided in her neighborhood, it was the theme of conversation, and statements were various and contradictory. On one of my visits to this lamented individual, I was accompanied by Doctors A. F. McMillin and H. G. Thornton, and we agreed to know its truth or falsehood from the evidence of our senses. Accordingly we visited Leesburg, the residence of Mr. Stout, the father of the *innocent, artless, unaffected* girl, aged thirteen years, the subject of so much attention at that period. On our arrival, at half past two in the afternoon, we learned that she was at meeting near at hand. A messenger was sent to bring her home. She returned in a few minutes. After some inquiries of her mother relative to her age, health, &c. and slight examination of the young lady, I led her to a window and sat down by her. I examined the thumbs of both hands carefully, in order to perceive a difference, if any existed. I saw some black spots on the thumb of the right hand, and asked if they were produced by punctures of a needle in sewing. I was endeavoring to get those spots from off her thumb with my pen knife, when a hair probably half an inch in length grew instantly from beneath the nail. I called the attention of the bystanders to it, among whom were Drs. McMillin and Thornton. In a few minutes a second one of like character appeared, but growing from the inside of the ball of the thumb. And at the expiration of some

five or six minutes a third one grew out, about the centre of the ball of the thumb. The first one came so unexpectedly to me, that I did not perceive its appearance until it had attained almost its full length. It curled in a ringlet form, as did the others; I touched it with the side of my knife blade; it was unctuous, adhered and came away without force.—All three had well formed roots, resembling the hair on a man's arm. The growth of the second and third I saw distinctly, as it were in their external formation. A small drop, like perspiration, stood for an instant, apparently at one of the pores of the skin, and from this grew the hair, with a quickness of which I had no conception. The two last were removed by touching them with the knife blade in the manner of the first.

There was no legerdemain in the affair—there was no attempt at imposition by the little girl or her friends. I held the thumb during the whole time, between my thumb and fingers—watched carefully every motion. Her left arm hung carelessly at her side. It is a singular case. But looking at it physiologically, it is no more than an *increased action of a natural function in an extraordinary place:* of this I have the evidence of both sight and touch.

Respectfully, your obedient servant,

J. C. FRAZER, M. D.

Elder Jno. A. Gano.

I certify that the statement of Dr. Frazer to Elder John A. Gano, is true in every particular, and I am satisfied no deception was practised in the matter. A. F. McMILLIN.

Cynthiana, March 7, 1842.

I have read the statement of Dr. J. C. Frazer to Elder John A. Gano, relating to the extraordinary growth of hair from the thumb of Miss Penelope Stout, of Leesburg, and confirm it. In addition to which I saw at another time the growth of some seven or eight others, varying in length, from 4 to 10¼ inches, among which were two bristles. I have known and practiced medicine in the family of Mr. Stout many years, and have no hesitation in saying that the parents and whole family are alike incapable of an attempt to practice deception on the public in this affair. No portion of the family betrayed the slightest disposition to any thing like humbuggery. It is a simple truth—witnessed by too many persons of respectability to afford the possibility of imposition.

A. G. THORNTON.

The undersigned states that he was present with Dr. A. G. Thornton at the period alluded to—that he held her thumb, at the time of the growth of one of the hairs—and removed it with his own fingers—and he has now in his possession some 4 or 5 of those hairs, varying in length from 3 to 8 inches, of various degrees of stiffness, from bristles to the softest hair, and of several colors.

WM. T. WITHERS.

CASE OF INTROSUSCEPTION.

BY DR. J. M. HAMMER, SEVIERVILLE, TENN.

On the night of the 8th of last December, I was called six miles into the country, to see a Mr. E.—— aged 69 years. When I arrived he appeared to be laboring under the most excruciating agony —his cries could be heard at least half a mile, and from this torture he obtained occasionally a few moments respite. His restlessness, of course, was excessive. The pain was chiefly in the right hypochondriac region, but extended to within an inch below the umbilicus, which he described as twisting and tearing his bowels to pieces. The pulse was strong, and 80 per minute; but little febrile excitement—skin dry, tongue coated, bowels constipated—no appetite, and some nausea. He was bled a quart, kept in a bath of 100° Fah., thirty minutes, and took a large dose of castor oil that opened his bowels. From these remedies he obtained no relief. I then gave him a large dose of the most powerful antispasmodics, which abated the pain. It soon, however, recovered all its intensity, for which another dose was given, and that rendered his situation more endurable.

The following night all his sufferings returned with undiminished violence, and I then gave him scruple doses of opium. But these produced no impression. I then threw into his bowels a mixture composed of a pint of castile soap suds, four ounces of epsom salts, one ounce of castor oil, a scruple of asafœtida, and a drachm of laudanum. No good resulted. Antispasmodics were continued for a week, when he was so much improved, as to be able to walk about his house.

On the 26th of the same month, he was attacked again in the same way, with great violence. The same course of treatment was followed, and with a similar result.

On the 19th of the following January, I was summoned again to see Mr. E—who, it was said, was in a very unaccountable condition. When I arrived he was free from pain and tranquil, and told me that his bowels had been down, and a portion of them voided. This I did not easily credit, and upon expressing my doubts, what had passed from his bowels was produced, and I found it, to my astonishment, to consist of a portion of the intestinal canal, two

feet in length. That what was presented to me came from his bowels, I had the positive assurance of the most respectable men who witnessed it, and that it was a portion of the bowels, I took the following means of determining.

A ligature was placed on one extremity of the voided tube, and it was then filled with water, when the arteries and veins which traversed it in all directions were rendered obvious. There was about two inches in breadth of the mesentery attached to it—in some places there was adipose matter about five lines in thickness, but in others it was entirely wanting—the serous, muscular and mucous coats, were easily distinguishable which were of a dark purple colour. The voided portion of bowel is now in my possession, preserved in whiskey.

Mr. E. is now alive and so well as to be able to walk about his garden, and if you doubt the truth of what I have said, the most conclusive proof can be procured from the most respectable persons.

Be good enough to give the above very singular case, a place in your valuable Journal, and tell me if the like has ever occurred before.

Sevierville, Tenn. March 28th, 1842.

Note.—The case of Dr. Hammer is singular and interesting, but not unprecedented. as he will find by referring to almost any work on the Practice of Physic. In a late work on the *Practice of Medicine*, by Professor Dunglison, he will see a case alluded to, in which three feet of the intestinal tube was passed. That work we recommend to his attentive study—it will aid him much in a knowledge of the nature and treatment of many morbid states that are but partially, or not at all noticed in most of the treaties on the Practice of Medicine.—Editor.

BIBLIOGRAPHICAL NOTICES.

An Historical Sketch of the State of American Medicine before the Revolution: being the annual address delivered before the Medical Society of the State of New York, February 1st, 1842, by John B. Beck, M. D. President of the Society; Professor of Materia Medica and Medical Jurisprudence in the College of Physicians and Surgeons of the City of New York; one of the Physicians to the New York Hospital; Corresponding Member of the Royal Academy of Medicine of Paris; Corresponding Member of the Medical Society of London, etc. etc.

This is a pamphlet of thirty-five pages, and forms a part of the Transactions of the State Medical Society of New York, and comes from an individual already extensively and favorably known to the medical public. The subject which was selected for the annual address is interesting as well as important, and the author deserves the thanks of the profession for having directed attention to the early history of medical science in this country. Few know any thing of it, and fewer still have condescended to study it; and yet because, as will be seen by a perusal of the address before us, of the ignorance or indifference that has prevailed in regard to it, we are in the habit of giving to Europe the credit of improvements to which our countrymen alone are justly entitled. Thus, in relation to one of our most important therapeutical agents, Professor Beck remarks:

"Although the physicians in the colonies generally followed the prevalent practice of the mother country, yet they are entitled to the credit of originating some modes of practice of great value. The most important of these is the application of mercury in the treatment of inflammatory complaints. This practice took its origin as far back as the year 1736, and the credit of originality is generally conceded to Dr. Douglass, a physician of Boston, by whom it was used in the angina maligna which prevailed extensively over the colonies at that period, and committed the most dreadful ravages. By Dr. James Ogden, a respectable physician of Long Island, this practice was extensively applied in the same disease about the year 1749. The preparation of mercury which was used was calomel. In consequence of the success which attended the use of this remedy in this disease, it was shortly after resorted to in other inflammatory complaints; and about the mid-

dle of the last century, it was in common use in this country in pleurisy, pneumonia, rheumatism, and others of the phlegmasiæ. I am aware the credit of this practice is claimed elsewhere; but there can be no doubt that in its origin it is exclusively American, and that to our colonial physicians the world is indebted for one of the greatest improvements ever made in practical medicine."

The following remarks on the practice of inoculation for the small pox, will be found novel to many and interesting to all.

"Among the events which characterized the history of our colonial medicine, the most remarkable, and certainly the most exciting, were those which attended the introduction of the practice of inoculation for the small pox. This was first introduced into this country in the year 1721; and it is to a clergyman, Dr. Cotton Mather, that the honor belongs of having first recommended it. During this year the small pox raged in Boston with unparalleled fury and fatality. Dr. Mather having read, in the Transactions of the Royal Society of London, an account of a new mode of mitigating the violence of the disease by inoculation, as practised in Turkey, communicated it to the physicians of the place, and urged their adoption of it. With the exception of one individual, it was unanimously opposed by the faculty. This individual was Dr. Zabdiel Boylston, who, with the confidence of an honest and enlightened mind, commenced his operations upon his own children and servants. The controversies which ensued were of the most ferocious and disreputable character. Such was the tempest of popular indignation raised against the practice, chiefly by the inflammatory conduct of the physicians, at the head of whom was Dr. Douglass, that both Drs. Mather and Boylston were in danger of losing their lives.—Passion and prejudice on the one side were, however, met by decision and success on the other; and inoculation, defended by almost all the clergy, many of whom preached and wrote in its defence, soon triumphed over opposition, and became prevalent in Boston and the neighboring towns. From thence it was introduced into the other colonies, and although uniformly resisted at first, the public mind became gradually reconciled to it. So early as 1738, it was practised in Charlestown, S. C., during the epidemic small pox which then prevailed there. In 1759 it was generally adopted in Philadelphia, where its dissemination was very much facilitated by a defence and recommendation of it by Dr. Redman. The true merit of Dr. Boylston, in relation to the introduction of inoculation, will not be appreciated unless it is stated that at this time the practice had only just found its way into Europe. By a singular coincidence, the first case of inoculation in Europe, took place in England in April, 1721, only two months before the first experiment of Dr. Boylston, and entirely without his knowledge. This was the case of the daughter of Lady Wortley Montague. This celebrated female, during her residence in Constantinople, having become acquainted with the safety of the practice, had her son inoculated, and on her return to England, her daughter was subjected to the same operation, and with perfect safety. This led the way to the speedy diffusion of the practice in England, as the experiments of Boylston did in this

country. It is gratifying to know, that although opposed and slandered at home. this eminent physician was appreciated abroad. In 1725 he visited England, and was received with the highest favor and attention by the most distinguished characters in the nation, and even by royalty itself. He was elected a fellow of the Royal Society, being the first instance in which that honor was conferred upon an American."

Many other interesting statements will be found in the able address of Professor Beck, with which we presume the majority of our readers are unacquainted, and to them we commend its attentive perusal.

The Select Medical Library and Bulletin of Medical Science.—Edited by John Bell, M. D. Lecturer on Materia Medica; Fellow of the College of Physicians of Philadelphia; Member of the American Philosophical Society; Corresponding Secretary of the Medical College of Philadelphia, etc. etc.

The second number of this periodical has been received, and we find its pages occupied by a treatise on "*Derangements, primary and reflex, of the Organs of Digestion.* By Robert Dick, M. D., author of "A Treatise on Diet and Regimen."

The republication of the work of Dr. Dick is an act for which Dr. Bell will receive the grateful thanks of his numerous readers, for it is one they will read with interest and advantage. It is the fullest, most comprehensive, and decidedly the best account of derangements of the digestive organs that we have encountered. While it embraces all that is important or interesting to be found in the writings of other authors, it contains much original information, which the physician will find of great practical usefulness.

While, however, we commend the work of Dr. Dick to the consideration of our readers, we must caution them to be on their guard against too hastily adopting his views of the sympathetic connexion of diseases of remote parts with gastric irritation. This is often the case, doubtless, but it is not near so frequent as he imagines. Nor can we close this notice of the work alluded to, without the additional admonition to our readers, not to be seduced into the adoption of Dr. Dick's style of writing. While we recommend the matter of his book, we should be very sorry to commend its manner. His style of writing is affected, constrained and pedantic—his frequent use of unfamiliar and even obsolete words is not only in bad taste, but it has rendered many of his sentences

confused, obscure, and sometimes almost unintelligible. Indeed, his fondness for grotesque modes of expression is so decided, that, in many places, there is plainly discoverable a resort to studied circumlocution in order to introduce them.

Proceedings of the Physiological Temperance Society of the Medical Institute of Louisville.

For several years, many very excellent and benevolent persons have used much concentrated effort to render the habit of using distilled and fermented liquors unpopular; and recently their praiseworthy exertions have been crowned with a very abundant success. But it appears that a new direction is now being given to the investigations of the scientific friends of temperance. The physiology and pathology of drunkenness, are now suggested as subjects of study to those who take an interest in the moral reformation that is going on with unprecedented rapidity, in almost every community; and it is to be hoped that the impulse that has been given to it by Professor Drake, who is President of the Physiological Temperance Society, will be followed up by other competent observers, and that the public will be furnished, at no distant day, with very valuable results.

MONTHLY PERISCOPE.

Weakness.—Persons ignorant of the causes of vital phenomena are apt to fall into great and serious errors with regard to diseases and remedies. Of these mistakes none is more common, or more mischievous, than the opinions which generally prevail about debility and the means of restoring strength.

The appearances of weakness are much the same in all cases where there is prostration of muscular power; and thus to the eye of one inexperienced in the nature and symptoms of disease, every condition of debility requires the same remedy. The bloodless face, the weak pulse, the sense of exhaustion, the loss of muscular vigour, all go to constitute what is commonly known as weakness, and strong aliment and stimulating drinks are the common remedies.

Now the fact is, that under the common symptoms of debility, various conditions of the system exist which differ entirely both in cause

and character, and require opposite management for relief. Weakness itself is not a disease. Loss of strength is the effect of many diseased conditions, and is only important as a sign of disorder. *Weakness never kills any body.* There is no state of prostration that nature will not relieve if the cause of it be removed; and on the other hand, no state of weakness can be relieved unless the remedies be directed to the total eradication of the cause of it. To regard the weakness of a patient as his disease is a great blunder, and to prescribe for this, without any reflection upon the probable reason of it, is mere quackery.

Of all the means of relief to suffering organs known to physicians, bleeding is the most powerful, most efficient and the safest. On the other hand diffusive stimuli are the least important, being of the least permanent efficacy, and withal the most likely to do mischief. Now the public do not understand this. They have observed that the greatest apparent difference between a sick and a well man, is that the former is weak and the latter strong; and moreover they have noticed that the sick man generally grows weaker as he draws nearer to a fatal termination of his malady. It therefore naturally occurs to them that if the sick could be made strong he would be well, and they are exceedingly anxious to administer such prescriptions as are supposed to be efficient in this way. Under such circumstances they regard a physician as mad if he proposes to *strengthen* his patient by bleeding him, and abstracting from him all nutriment except that which is the least stimulating. Yet this may often be the rational course, while a contrary one would be egregious folly.

Weakness may be absolute and real, or merely apparent and fictitious. By a sudden loss of a large quantity of blood a healthy man may suddenly be made absolutely weak. All the tissues of his body are in this case suddenly deprived of their ordinary amount of sustenance.—The same thing occurs if a man be deprived of food; he becomes weak from the absolute want of the materials of strength.

But a man may be as suddenly prostrated without the loss of a drop of blood, and perhaps immediately after a hearty dinner. From the influence of some morbific cause, the force of the heart's action may be suddenly lessened. The blood, not impelled with accustomed energy, lingers in large quantity about the large vessels, and loads the important viscera—as the lungs for instance, which are embarrassed and hindered in their functions, while the remoter parts of the body suffer for the want of that very blood which is unnecessarily accumulated in the deeper seated parts. A number of mischievous processes are immediately commenced, which unless relief be afforded may end fatally —and among the symptoms of this condition weakness is the most prominent and most striking to the beholder. Now these two conditions are apparently alike but really very different. The one requires nothing but proper food, to relieve it, the other may require copious blood-letting and privation of the ordinary amount of food.

Again, debility may be direct or indirect. It may be the result of the direct abstraction of blood or privation of food, or want of heat, and hence may be called direct debility. On the other hand it may be the result of over excitement, either mental or physical, and may be called *indirect debility.* Now the symptoms of these conditions are the same,

yet the conditions they represent are very different. In the first instance the excitability of the system is greatly increased, in the latter, diminished. In the first a man may be destroyed by an ordinary amount of stimulating drink, or food, or heat; in the latter he will bear a large amount of stimulus without injury and perhaps with benefit. A man exposed to intense cold is debilitated, from loss of caloric—his excitability in the meantime is so greatly increased that if you bring him to a hot fire you kill him—in fact *burn* him to death. A man deprived of food becomes weakened, but his excitability is increased—give him a good dinner and you kill him. These are instances of direct debility. On the other hand, a man in the habit of using ardent spirits in excess may also become weakened, but at the same time his excitability is so much diminished that he can bear an immense quantity of alcohol and opium without much effect. Here is indirect debility.

Now these conditions are certainly not the same, yet both are manifested by "*weakness*," and we adduce them by way of showing the impropriety of the friends of patients interfering with the treatment of these and similar cases, which it requires no little medicinal tact to distinguish and understand.—*Guardian of Health, Baltimore.*

Quinine in Asthma. By B. R. Hogan, late U. S. A.—The value and importance of *quinine* in all paroxysmal and congestive diseases has secured for it a high place in our catalogue of therapeutic agents. In the latter condition of any of the important organs, it is the safest and most efficacious agent in the materia medica. From its happy influence in relieving congestion, in our autumnal fevers, I was, *a priori*, induced to administer it in asthma. In every instance in which I have given it, or known it administered, the complete relief of the *dyspnœa*, and termination of the paroxysm, have succeeded in an hour. Subsequent attacks have been warded off. The paroxysm is as *tractable* to the influence of quinine as the slightest quotidian.

In the forming stage of croup, two grains of quinine, and a snuff plaster to the breast of a child, two years old, parried the attack.

My friend John A. English, M, D., of Cohaba, Ala., has used it with complete success, in a long standing case of asthma, which had resisted the usual remedies. Four grains of quinine "operated like a charm," and relieved the patient in thirty minutes.

I communicate to you this important effect of quinine, in order that the profession may scrutinise the high claim I set up for it, and by further experience, direct in what cases it may be most beneficially administered, in one of the most distressing and intractable diseases "which flesh is heir to."

From two to eight grains of the suph. quinine at a dose, to be repeated in an hour if not relieved. B. R. HOGAN.

Cambridge, Dallas Co., Ala., Jan. 31, 1841.

[*Dunglison's Med. Library.*

Opium in Strangulated Hernia.—In the 12th No. of the *N. Y. Medical Gazette*, Dr. Shipman gives four cases of Strangulated

Hernia, in which opium in a large dose was effectual in producing reduction, after several other remedies had proved unavailing. In all the cases, free depletion, nauseating medicines and the "taxis was tried and persevered in, as long as was prudent, and until the tenderness was such that it could not be borne," and yet "the relief was soon after the system began to feel the effects of the doses, and before the perfect relaxation which the full effect of opium produces. One striking effect was observed in all the cases. The patient ceased bracing his muscles and straining, which they are apt to do when laboring under Strangulated Hernia, which produces tension of the abdominal muscles, and greatly hinders the return of the protruded bowel. The bleeding, and other relaxing measures, which preceded the administration of the morphine, no doubt had their influence in preparing the system; as I have often observed, that the good effects of opium are much more happy subsequent to thorough depletion."

Lunatic Asylums.—We so perfectly concur, as every reflecting and intelligent individual must, in the following remarks of Dr. Jarvis, that we cannot deny our readers the pleasure and advantage of their perusal, and we earnestly hope that every enlightened mind will exert itself to the utmost to awaken the people of the valley of the Mississippi, from the indifference and insensibility which have been too frequently displayed towards a most unfortunate class of our fellow-citizens. Much has already been done to ameliorate their deplorable condition, but much still remains unaccomplished, that should challenge immediate attention, before we can stand acquitted of the discharge of an imperative duty, in the estimation of an enlightened philanthropy:

First, the asylum must have a physician for its superintendent, who shall give his entire and undivided attention and companionship to the patients. This is indispensable. Browne says—"The opinion was, and perhaps still is prevalent, that if a building of suitable dimensions and security were provided, and if medical advisers occasionally saw the inmates, all was done for the insane that could be expected or that could be useful. Every day's experience shows, that these provisions are utterly inadequate to the end proposed—if that end be recovery, and not the confinement of the insane." But there must be a physician ever present, and be well qualified for his station. He must be a man of skill, self devotion and industry. He should be firm and courageous, yet of placid temper, and the gentlest manners. He must have a quick apprehension to discern the disposition and disorder of his patients, and tact to manage them. He must be benevolent towards man, and have

a strong love for the particular branch of the profession which he assumes. "The basis of such a character must be dispositions truly Christian," and "there must exist a benevolent kindness, which shall be so deep and expansive, as not merely to feel sympathy for the lunatic because he is an alien to his kind, because he is visited with the heaviest and hardest affliction which humanity can bear and live, but feel an interest in those unreal, artificial, and self-created miseries, with which the distracted spirit is oppressed. And this kindness will be as solicitous to alleviate suffering, where it is absurd, and the result of violence and perversity of temper, as where it flows from misfortune. There must be a benevolence which will be prepared to make the lunatic a companion and a friend." The physician must associate with him on terms of reciprocal confidence, and mutual forbearance, of fellow feeling and rational counsel. He must forget that an awful but not an impassable gulf of obliterated requirements, numbed or lethargic emotions, and darkened reason, separate him from the maniac, but regard only the faculties they yet have in common, and make these the ground work of their intercourse. "There must be that benevolence which will imitate the mercy of Him, who in curing the broken and bewildered spirit of the demono-maniac, 'took him by the hand and lifted him up.' But this gentleness must be controlled. The merely benevolent physician can never be a good practitioner." Such a one may be too indulgent, and while he is yielding to the tender impulses of his heart, and gratifying the temporary and capricious wants of his patients, he may be indulging vicious propensities, and encouraging and feeding those very delusions that are the cause of the derangement. "There must be mingled with this sentiment of benevolence that highly refined sense of duty and that keen perception of right, which guides even kindness and affection in their ministrations, and which holds the balance as scrupulously in deciding on the moral rights of lunatics, as in determining the civil rights of our fellow-citizens.

Two cases of Excision of the Callus, in badly united Fractures. By Professor Portal.—A man 32 years of age, fell from a cart and fractured his tibia and fibula nearly in their middle. Inflammation, followed by purulent infiltration, attacked the limb, and as the patient was very restless, after the cure was effected it was found that the fragments of the bone had united in an irregular angular manner.—Professor Portal first tried to break the callus across, in order to reset the limb, but not succeeding in this, he cut down on the irregular angular projection by a vertical incision, and uncovering the bones, passed a chain saw round them and removed about an inch of the bone. The wound united by the first intention; the limb was kept carefully extended and in forty-eight days the patient was dismissed cured. The limb was shortened a very little.

The other case was that of a woman, who had received a compound fracture of the upper third of the thigh bone. On account of the violence of the inflammation the limb was at first semiflexed, and when this had abated it was placed in the extended posture. After a period of twenty eight days the bandage was removed, and it was found that the union had taken place irregularly, the broken ends forming an angle at

their union. As it was found impossible to rupture the callus which had been thrown out, the ends of the bone were cut down on, a chain saw passed first round the upper fragment and about an inch and a half removed, and then around the lower, and half an inch of it cut off. The limb was then maintained in a state of permanent extension. The wound suppurated and became covered with an eschar, but no other unfavorable symptoms followed; and fifty-five days after the operation she was dismissed cured, with the limb shortened to the extent of two finger breadths, but perfectly serviceable.—*Medical Examiner from Edinburg Medical and Surg. Journal, from Gaz. Med. de Paris, 18th September*, 1841.

Treatment of Uterine Hæmorrhage. By Dr. Grattan.—Having directed my attention to the administering of powerful styptics, I commenced by giving tolerable large doses of sulphate of alumina and aromatic sulphuric acid with the most decided benefit; finding that under the use of this medicine the hæmorrhage would become lessened in a few days, I commenced giving a mixture of—Sulphate of alum, drs. iij.; sulphate of magnesia, drs xij.; aromatic sulphuric acid drs. ij.; water f gr. xij. M. Of this an ounce was given every four hours, and where much pain existed a grain and a half of acetate of morphia was added to the whole. When the stomach rejects every other medicine, and even brandy and water, this will remain down; and, after the administration of one or two doses, the hæmorrhage will be considerably lessened; and seldom or never have I to go beyond four doses, when it will have ceased; but when I arrive at that stage, I continue the mixture without the sulphate of alumina, and give it in doses of an ounce, three times a day for two or three days. In about two hours after the first dose has been taken, the patient becomes hot, the tongue hard and dry, presenting much of a typhoid appearance; pulse hard and steady; considerable thirst, which must not be too largely gratified; and these symptoms will remain, should the bowels not be acted upon by the sulphate of magnesia in the mixture. A copious evacuation of the bowels should be effected within twelve hours; and if the medicine does not effect this, we should give one ounce of castor oil and two drachms of tincture of jalap in a little peppermint water. Should this not succeed in the course of two hours, a quantity of warm water must be injected with an enema syringe. This practice is absolutely necessary, as should the bowels be too long confined mucous inflammation might ensue. After they have been well freed, the tongue gradually regains its natural appearance, and the secretion from the uterus will, in the course of twenty-four hours, become thin and fœtid, quite pale in color, and gradually disappear after a little time. Such has been the manner I have for years treated cases of this description, and the success that has attended the practice has been most encouraging."—*Provincial Jour.*

Fissure of the Anus cured by Enemata of Ratanhia.—We find in the report of the Clinique of Prof. Trousseau, at Necker Hospital, four cases in which this very troublesome and painful affection has been cured by simple enemata of extract of Ratanhy. The Professor remarks that similar cases have been published before; they escaped our

notice however, the remedy is new to us and we shall most assuredly make trial of it the first opportunity that offers. It is indeed a most important improvement if we can substitute for a surgical operation, which is always painful and sometimes even dangerous (for M. Trosseau reminds us that a distinguished Parisian Professor died from the operation,) a remedy so simple, so easily administered and so perfectly innoxious as the injection of Ratanhy root. We condense one of the cases.

A. B., female, aged 33 years, mother of five children, the youngest a month old—has had piles for eleven years. The piles first appeared four months after the first confinement, and the attack was so severe as to require leeches, &c. Since that time the hemorrhoidal tumors have appeared nearly every month at the time of the menstrual secretion, and disappeared as soon as that function was performed.

After each confinement the anal tumor appeared in an aggravated form and there was frequently hemorrhage from them. During pregnancy *they appeared as usual every month, though the woman did not menstruate.*

For three years she has had symptoms of anal fissures, and on examination with the finger, acute tenderness was complained of at the posterior verge of the anus, opposite to the coccyx. On looking at the part a fissure was found to exist between two of the hemorrhoidal tumors and to extend some distance up the gut. The disease being thus satisfactorily diagnosticated, the following treatment was adopted. Two enemata composed as follows were given every day.

R. Extr. Ratanhia, grs. xcv.
Water gr. x. dr. iij,. m. ft. enema.

To be retained for from half an hour to an hour, when the patient should endeavor to pass it. Two injections a day were given, from the 11th to the 17th of December, from the 17th to the 21st, one a day—and after that one in two days, till the 28th, when the remedy was discontinued, and the patient being quite free from all the distressing symptoms of anal fissure was merely directed to use from time to time a simple enema to obviate constipation.—*N. Y. Med. Gaz.*

Treatment of Pneumonia. By Dr. Watson, *Lecturer on the Practice of Medicine in King's College, London.*—We want some remedy, therefore, to assist the lancet, or to employ alone when the lancet can do no more; and we have two such, in *tartarized antimony* and in *mercury.* The tartar emetic plan I believe to be the best adapted to the first degree of the inflammation—that of engorgement; and the mercurial plan to the second—to that of hepatization.

I need not tell you that the tartarized antimony is not given in this disorder with the object of producing vomiting. It is a very curious thing, that although when administered in a considerable dose, its first effect is often that of exciting sickness, and perhaps purging, a repetition of the same dose, is in the majority of cases, at length borne without any farther vomiting. The stomach comes to *tolerate* the medicine, as our continental brethren say; and then its beneficial influence upon the disease is no less marked than when nausea and vomiting take place. Some patients do not vomit at all; others, the majority in fact, vomit two or three times, and then *tolerance* is established. If the sickness and

purging go on, they may be checked by adding a few drops of laudanum to each dose. Dr. Thomas Davies, who had tried this remedy largely, and, as he tells us, with great success, gives the following as his own plan of administering it, and perhaps it is as good as any. After free bleeding, he begins with one-third of a grain of tartar emetic in half a wine glass full of water, with a few drops of laudanum or syrup of poppies. Two doses of this strength he gives at the interval of one hour from each other. He then, if the patient does not vomit, omits the opium, but continues it if he does, doubling, however, the quantity of the tartar emetic, giving two thirds of a grain for two successive hours; and in this way he goes on, adding two-thirds of a grain every two hours, until he reaches two grains every hour. This last quantity he has not exceeded, and he says he has continued it for many days without producing any injurious effect.

Under this plan of treatment the symptoms will often undergo a marked change for the better, in three or four hours. Sometimes, however, the relief is not conspicuous for twenty-four or even thirty-six hours. He states, and this is accordant with my own experience of the remedy, that the tartar emetic always acts best when it produces no effect except upon the inflammation itself; i. e. when it does not produce vomiting, or purging, or a general depression of the powers of the system. This is an important practical remark, because many persons have supposed that it subdues the disease only when it previously gives rise to these effects. I consider this testimony of Dr. Davies to the power of tartarized antimony in controlling inflammation of the lung the more valuable, because he informs us, that before he had occasion to see its admirable effects in the first stage of pneumonia, he had been in the habit of trusting to the free use of mercury, after due depletion.

When the dyspnœa has been put an end to by antimony thus exhibited, the medicine may be intermitted; and if the inflammation show any disposition to rekindle, it must be again extinguished by a repetition of the tartar emetic.

When, however, the inflammation has reached the second stage, that of solidification, mercury is more worthy of confidence in my opinion, than tartarized antimony. And I have little or nothing to add to what I formerly said in respect to the mode in which it ought to be administered. The only object of giving it is to make the gums tender; and it is expedient to do this as speedily as may be. Small doses of calomel repeated at short intervals—a grain every hour, or two grains every two hours, or three grains every three hours—combined with so much of laudanum or of opium as may be requisite to prevent it from running off by the bowels—offer the most certain way of accomplishing our object. If the bowels are irritable under the calomel, blue pill, or the hydrargyrum cum cretê, may be substituted for it with advantage: and if the internal use of mercury be any how contra-indicated, or if it appears slow in occasioning its specific effect, the linimentum hydrargyri may be rubbed in, or the strong mercurial ointment.

Many persons, I am persuaded, are saved by treatment of this kind, pushed to slight ptyalism: the effusion of lymph, tending to spoil the texture of the lung, is arrested; and the lymph already effused begins to be again absorbed: and the ease and comfort of the patient, as well as

the alteration for the better of the physical sounds, attest the healing qualities of the remedy.—*Lon. Medical Gazette.*

The use of the Actual Cautery in Procidentia Uteri. By J. ADAIR LAWRIE, M. D. *Surgeon, Glasgow Royal Infirmary.*—[The following is an interesting case. showing the efficacy of this valuable remedy in procidentia uteri. Christian McLean, æt 18, a servant, while carrying a heavy tub, felt something give way in the pelvis, and as if the vagina immediately afterwards was unusually distended. Some days after this, the uterus distended the vagina, and rapidly descended so as completely to prolapse. It could easily be returned by pressure, but again descended almost immediately. She derived no benefit from the free application of the nitrate of silver, astringent injections, pessaries, bandages, and the ordinary treatment. Strips of the mucous membrane of the vagina were dissected off from the lateral and posterior parts of the vagina, without any benefit.]

On the 2nd of October, the uterus being returned, Weiss's three-pronged speculum was introduced and dilated, and the actual cautery freely applied to both lateral surfaces of the vagina nearly as high as the uterus. The operation gave considerable pain, and was followed by œdema of the external parts, retention of urine, some pain of abdomen and hysterical symptoms, which readily yielded to mild treatment. She was kept in the recumbent posture till the 13th of November, and in hospital till the 8th of December. On the latter date the following report was entered in the journal. 'Not the slightest tendency to renewal of the procidentia; she has no feeling of prolapsus. Uterus felt nearly in its natural position, with a circular contraction of the vagina a little below os uteri. The contraction firm, but quite elastic.'

July 18, 1841.—She returned to the hospital, and the following report was taken. 'Continued to do well till ten days ago, when, after having been employed for two days in the standing posture, used unwonted exertion, and afterwards taken a long walk, the prolapsus returned, and is gradually increasing; but the external tumor is not yet nearly as large as when she was first admitted.'

July 25th.—The actual cautery was applied in the same manner as formerly, and was followed by the same train of symptoms, which readily subsided under one bleeding, aperients, fomentations, &c. She was confined to the recumbent posture till the middle of April, when she was allowed to walk, with a T bandage, and a compress on the perineum. On the 25th of that month she was dismissed cured. I have heard of her within these few days. She remains free from prolapsus, or any tendency towards it.

Remarks.—I am not aware that the actual cautery is in common use, in this country, as a cure for procidentia. The above case appears to me worthy of being recorded, as showing that it will succeed in extreme cases, after the failure of the more common operation with the knife. In future I should prefer the cautery, as being rapid and easy of application, and so far as two applications can prove, not followed by any bad consequences and successful.—*N. Y. Lancet, No.* 14.

Extirpation of Uterine Polypi.—At the meeting of January 18th, M. A. Berard, who at a previous meeting, had shown a fibrous polypus which he had removed from the cavity of the uterus, after dividing the neck of that organ, exhibited another fibrous tumor, which he had extracted in the same manner, and with equal success. The patient had labored for a considerable time, under uterine hæmorrhage, which had reduced her to the lowest state of exhaustion. Although the orifice of the uterus was open, it was not sufficiently so to allow the tumor to pass through it. M. Berard divided with a bistoury both sides of the os tincæ, and the tumor immediately descended into the vagina. The operator now fixed a hook into it, drew it down to the vulva, and removed it by cutting across the pedicle with a scissors. The uterus ascended quickly to its natural position, and the hæmorrhage did not recur. M. Berard thinks that facts of this kind should be made extensively known for as many surgeons still think that a polypus enclosed in the uterine cavity is beyond the reach of operation, many females are allowed to perish whose lives might be saved by this method.—*Phil. Med. Exam. from Prov. Med. and Surg. Journ., Jan.* 29, 1842.

Walnut-leaf Tea, a good remedy in Scrofulous Complaints.—Professor Negrier, of Angers, a respectable authority, has for some years past been trying the effects of an infusion of the leaves of the walnut tree in a variety of scrofulous maladies, and the results of his experience have led him to form a most favorable opinion of it as an antiscrofulous remedy.

He reports a great number of cases of disease of the lymphatics, with or without ulceration of the integuments, of scrofulous opthalmia, of affections of the bones and periosteum, &c. in which decided and very marked benefit was obtained from a course of this simply prepared tea. A handful of the fresh or slightly dried leaves may be added to a pint of boiling water, and of this infusion a small cupful may be taken twice a day. An extract may also be prepared by evaporation, and this Dr. Negrier recommends to be given at the same time, either in the form of pills or of a thick syrup. A strong decoction of the leaves he has used with excellent effects as an application to scrofulous ulcers.—*Med. Examiner from Med. Chir. Rev. from Journal des Connois, Med. Chir.*

The Importance of the Microscope.—"The microscopic examination of the fluids and solids is a most valuable part of morbid anatomy, as well as of morbid chemistry. Already it has conferred great benefits on medical science, and still more important discoveries no doubt are yet to be made. The scalpel, the test-tube, and the microscope are the three equally necessary implements of pathological study,—and the right mode of using each of them should be well understood by every medical student. Hitherto the former has occupied an almost exclusive attention; but now a sounder method of examination has been introduced, and already has produced some valuable results."—*Medico-Chirurgical Review.*

Cupping and Animal Diet in Chronic Nephritis.—By P. Rayer. In all cases of chronic nephritis, from whatever cause it may proceed,

there is no remedy so decidedly useful as cupping over the loins. Even when there is co-existing disease of the bladder or of some other part of the urinary apparatus, the relief is often almost instantaneous after some ounces of blood have been withdrawn by means of the scarificator. The application of hot poultices afterwards, and the use of the warm bath may generally be recommended at the same time.

With respect to the use of acids, as means to obviate an alkaline state of the urine, and to counteract the tendency to the precipitation of the phosphatic salts, M. Rayer informs us that his experience is by no means very favourable to the practice. He has repeatedly observed that they entirely failed in producing the desired effect, and when continued too long, or administered in large doses, they often seemed to injure the state of the stomach and the general health of the patient.

"I have seen," says he, "in workmen affected with chronic nephritis, the urine become acid and transparent after a fortnight's repose, and enjoyment of a good diet, in conjunction with one or more applications of the cupping glasses to the loins, and again become muddy and alkaline when the food was less nourishing, or the patients had taken any extra fatigue. I have carefully compared the effects of a vegetable and of an animal diet in such cases, and am satisfied that the latter is to be preferred. Not only does the state of the urinary secretion become more normal under the use of nutritious food, but the general strength and health of the patient very decidedly improve."—*Ibid.*

Amputation during Pregnancy.—Mr. Tarlton, of Birmingham, reports a case in which he amputated the leg above the knee, in a woman who at the time was four months advanced in pregnancy. No unpleasant symptoms occurred after the operation; and on the 4th of September, five months and three days after the operation, she was delivered of a fine boy, which she still suckles. The cause for which the limb was amputated, was necrosis of the tibia, which had extended into the knee joint and caused irritation, under which her system was sinking when the operation was resolved on.—*N. Y. Med. Gaz.*

Number of Suicides in France in 1839.—During the course of this year 2,717 cases of self-destruction have been reported by the authorities of the different departments; of this number, 698 were committed by females; and 486 occurred in Paris alone.

We cannot, however, regard this as the entire number of suicides perpetrated throughout France, during the year; for many undoubted cases, says the reporter, are, either from insufficient data or at the importunity of relatives, registered as deaths from accident. The following table shows that the dreadful crime of self-destruction has been yearly increasing during the last four years:—

1836	2,310
1837	2,413
1838	2,556
1839	2,717

Gazette Medicale.

Ioduretted Mercurial Syrup for the Treatment of Secondary Syphilis.—Dr. Gibert has for some time been using the following syrup in many cases of obstinate secondary venereal affections.

Take of

Bi—or deuto-ioduret of Mercury . .	1 part (gramme)
Ioduret of potassium	50 parts
Distilled water	50 parts

Dissolve, filter through paper, and then add of

Very clear syrup	2400 parts.

The usual dose is a table spoonful, which may be said to contain one centigramme of the bi-ioduret of mercury, and 50 centigrammes of the ioduret of potassium. The syrup has no unpleasant taste and possesses the great advantage of remaining unchanged for a great length of time.

The proportion of the ioduret of potassium in the syrup is more than sufficient to hold the mercurial bi ioduret in solution; but, besides that it serves to counteract the tendency of the latter to decomposition, it is in itself a useful remedy; whence the excess is rather an advantage than otherwise.

M. Gibert also occasionally orders the bi ioduret in the form of pills, thus:—

Take of

Bi-ioduret of mercury . . .	0,10 grammes.
Ioduret of potassium . . .	5.00 ——
Powdered gumarabic . . .	0,50 ——
Honey	q. s.

Make a mass to be divided into 20 pills, of which two or more may be taken daily.

By means of these formulæ, M. Gibert tells us that he has succeeded in curing several cases of inverate syphilis and scrofulous cutaneous disease, which had long resisted every other remedy.—*Medico Chirurgical Review.*

On the Operations for the Cure of Stammering.—A well written article, in which the reader will find an accurate description of the various operations which have been recommended and practised for the relief of stammering, appears in one of the late numbers of the Archives de la Medecine Belge (an exceedingly well-conducted periodical, published at Brussels.) from the pen of Dr. Zoude. We have no intention of reproducing its contents, however valuable they are as forming an historical document, and shall merely give the sensible conclusions with which the writer closes it: they are the following:—

1. Glossotomy is far from effecting a cure of stammering in all cases.

2. When stammering is owing to a disturbed innervation of the tongue, or when it depends upon a shortening of the muscular substance of the *hyo-glossi*, or upon other analogous lesions, myotomy is inapplicable; because, in such cases, it would be necessary to divide the entire thickness of the tongue—an operation which is always highly dangerous.

3. A surgical operation is admissible only when the stammering depends upon a shortening of the *genio-glossi* muscles—as certainly is the case in a great number of instances.

4. In my opinion, the subcutaneous method of dividing the *genio-glossi* close to their attachment to the jaw, without wounding the mucous lining of the mouth, is preferable to any other.

The following judicious remarks are appended to the memoir of Dr. Zoude, by the committee appointed by the Society of Medicine at Brussels to report upon it.

. . . . . "We have read the work of the honorable member with much interest, and recommend that it should be printed in our Archives as containing a fair account of all that has been written on this operation, (which, by-the bye, has made much more noise than done good,) and as showing most satisfactorily that the section of the muscles of the tongue is not always so innocuous as its advocates wish us to believe. We sincerely trust that the attentive perusal of Dr. Zoude's memoir will abate the zeal of those who have been so enthusiastic in the praise of myotomy, by the vain eclat which has been given to the operation, and that, at the same time, it will diminish the willingness of patients to submit to it. We are deeply convinced that, as to the pretended improvements of modern surgery, it is most necessary to guard ourselves against admitting them too readily, and not to lose sight of the truth that the insatiable desire for notoriety and temporary success often makes a man work almost entirely for his own profit, when he is pretending that all that he does is for the progress of science: *Nisi utile est quod agimus, vana est gloria nostra.*"

We (*Rev.*) need not say how entirely we coincide in the justness of these observations. The *doings* of not a few medical men, in this country as well as on the continent, in reference to the treatment of squinting, stammering, &c., by surgical operations, have been any thing but creditable to the profession.—*Ibid.*

This is the result we anticipated, and in a previous number expressed it.

The Vascularity of Tubercle. By P. N. Kingston, M. D.—The analysis which appeared in your journal on September 24th of a lecture by M. Lugol—a high authority on the subject in question—affords ample confirmation of the observations I published in 1836, on the organization and vascularity of tubercle. It is stated that M. Lugol has, in numerous cases detected blood-vessels ramifying, not only in the cyst, but in the tubercular matter itself. In my paper on Tubercle, published in the twentieth volume of the Transactions of the Royal Medical and Chirurgical Society of London, I gave an account of seven cases in which great numbers o pulmonary tubercles, of the ordinary kind, presented, under the microscope, red vessels, which ramified and anastomosed through their interior, and were connected at the circumference with the vessels of the lungs: and I mentioned that in one of these cases, red vessels were also seen in tubercles of the bronchial and mesenteric glands.

I may add, that five months after my paper was laid before the Society

Dr. James Macartney, the distinguished Professor of Anatomy at Trinity College, Dublin, stated at the British Association, that he had succeeded in injecting tubercle.

The concurrent testimony of observers, who appear to be ignorant of one another's observations, will, I trust, be considered by your readers as demonstrative of the fact, and as these vessels are only now and then visible, and cannot be with certainty discrimminated without much patient examination with the microscope, they will not be disheartened if they should not in their first attempts succeed in detecting them.

Another instance in which a texture, long supposed to be unorganised, has now been proved to possess blood-vessels, is furnished by articular cartilage in the adult. Its vessels, being in health very minute, and not destined to transmit red blood, were not easily detected, even after careful attempts at injection; and were in consequence, positively denied to exist by Cruveilhier, Velpeau, Key, and others. Nevertheless, Bichat, Gordon, Brodie, Mayo, and Alison, saw reason confidently to infer that they must be vascular and organized. Bichat noticed that they were liable to be reddened by inflammation; and Sir Benjamin Brodie met with occasional, though rare instances, of vessels containing red blood extending from a diseased bone into the cartilage covering it. At last Mr. Liston has shown that the injection of articular cartilage which had been generally maintained to be impossible, from a total absence of vessels, is only difficult, and may with skill be, under favorable circumstances, accomplished.—*Phil. Med. Examiner, from Lon. Medical Gazette, Nov.* 26, 1841.

Case of Absence of external Genitals, and Formation of an Artificial Vagina.

To the Editor of the New York Lancet.

Sir: In April, 1838, I was requested to visit Miss——then about 18 years of age. I found her suffering from severe pain, which intermitted, and returned in aggravated and excruciating paroxysms, similar to those of parturition. On investigating the history of the case, I was informed that the pains had first made their appearance about twelve months before, and were then slight and transitory, similar to those anomalous ones of which young females usually complain about the period of puberty; that they were not permanent, but returned about every four weeks, increasing in duration and intensity, that the last two or three attacks had continued each time for more than a week, and were so severe that the patient could find no relief, except from large and frequently repeated doses of opium. The case indeed was first brought to my notice by a relative of the patient, who came to my office for the purpose of purchasing that drug.

On visiting the patient, I was informed by her mother that the organs of generation were wanting, but that her breasts were fully developed. After considerable hesitation, she permitted me to examine the parts. I found the mons veneris, and that part of the ossa innominata called the ossa pubis entirely wanting, and their place supplied by a semi-cartilaginous membrane similar in appearance to a cicatrix from a large and deep burn or ulcer. The labia were also absent, as well as the clitoris

and nymphæ, neither were there any signs of a vaginal or urethral opening. Indeed, the whole space from above where the pubis is usually found to the anus, was one even surface, except some corrugations of the integument.

The urine escaped by a constant oozing from an uneven, spongy and vascular excrescence, placed in the situation of the umbilicus, about as large and similar in color to a ripe middle-sized tomato, but rough and papilious on the surface. During a paroxysm of the pain, I thought I could perceive a slight elevation of the integument over that part which should be the situation of the vagina. I supposed, therefore, that as the breasts were well developed, notwithstanding the external generative apparatus was wanting, the internal and most important might exist, and that the pains arose from the expulsive efforts of the uterus to free itself from the accumulating menstrual fluid. I administered a full dose of morphine, and remained until its operation had quieted the pains. I then prescribed a mild purgative, and ordered a second dose of morphine to be given after the operation of the aperient.

The next day I returned with my friend, Dr. Donation Binsse. The patient had passed a good night; the medicine had operated freely, but the pains were returning. After examining the parts with great care, Dr. B. agreed with me that it would be advisable to make an incision to permit the escape of the fluid, which was supposed to have accumulated.

I had the patient accordingly placed in a convenient position, and with a scalpel commenced dissecting cautiously through that part which seemed to be elevated the day previous. I continued this dissection with great care, for I was fearful from the abnormal condition of the parts, that I should meet with some unusual disposition of other important organs.

After dissecting down about half an inch, or perhaps more, a dark substance began to ooze from the wound, of the consistence of tar, and in color a shade darker than Spanish-brown paint, but without any offensive odor. I then introduced a probe-pointed bistoury, with which I enlarged the opening both upwards and downwards. Through this from two to three pints of the fluid above described escaped in a short time, followed by almost immediate relief.

On visiting her next day, I learned that the discharge had nearly ceased, and the patient was very comfortable. The opening was kept pervious by a roll of linen saturated with melted beeswax, and secured with a T bandage. I have seen her frequently since, and learn that the catamenial discharge is regular and the opening permanent.

She has well-formed, pleasing features, and a full figure, somewhat enclining to *embonpoint*. I have not inquired whether she has any sexual desires.

Since I operated, I have frequently requested permission to take a plaster cast of the parts, which she has always refused until last fall, when the skin immediately below the tumor already described, became abraded from the constant flow of urine, and being very painful I was sent for to prescribe. I then obtained a mould, a cast from which I shall be happy to send you, if you desire it.

I am sir, yours, &c. W. Magee, M. D.

Paterson, N. J., March 1, 1842.

Treatment of Tape Worm. By Dr. Wawruch. *Professor of the Practice of Medicine in the University of Vienna.*—[In 206 cases of tape worm, Dr. Wawruch found the following treatment the most efficacious:)

As a preparatory step, all the patients took a laxative decoction with sal ammoniac, for three, four, or five days. and ate nothing but weak soup thrice a day. In eight cases the worm was expelled by the mere effect of continued abstinence. The anthelmintic remedies employed were. castor oil, and the powdered root of the male fern. From one to two table spoonfuls of the oil were given as a dose, alternately with one or two drachms of the powder twice or thrice a day.

Enemata of oil and milk were frequently thrown up, to attract the worm towards the large intestine, and it was observed. that the effect of the drastic was always most sure when given a certain time after the last dose of fern, than at once. The drastic purge employed was composed of equal parts of calomel, gamboge, and sugar, two to eight grains of each for a dose. In many cases a single dose brought the worm away, but in others three to six doses were required. The period at which the worm was discharged was very various. In eight cases, as has been already remarked, it was expelled by the mere effect of hunger; in thirteen cases by the anthelmintics alone; in eleven by the first, in fourteen by the second, and in fifteen cases by the third drastic purge; and, generally speaking, it was expelled within one to twelve hours after the last drastic. In a few cases, two, three, four, (and in one twelve) days elapsed after the last purge, before the worm was expelled. The tænia is not exclusively a *solitary* worm, for in nine cases there were two worms, of different ages and developement; in two cases three worms. In one very remarkable case. four worms were discharged. and this patient still suffers from the complaint. Of the 206 cases only twenty-six had a relapse; twenty of these came twice, five thrice. and one of them four times to the hospital. Some came in two to four months; two in nine months; two in a year. Generally speaking, the patient may expect to be entirely freed from this disease, if he pass ten or twelve weeks without discharging any remnants of the worm.—*N. Y. Lancet from Provincial Med. and Surg. Journal.*

Medical Memoranda.—Professor Parker pronounces the operation of Dieffenbach and all its modifications as a failure. They do good for a little while, "but in 10 to 14 days, I found them (his patients) coming back again stammering as bad as ever. I have therefore abandoned the operation."——A new paper, to be called the Magnet, is about making its advent in New York, to be edited by the Rev. Le Roy Sunderland, devoted to human physiology, phrenology, physiognomy, pathognomy, and human magnetism.——Amputation at the hip-joint, has been performed by

M. Textor with success, and at last with an equally fortunate result at Paris, by M. Sedillot.——The Ozark, (Ark.) Eagle, of the 5th ult., states that during a very severe hail storm that occurred on the preceding Thursday, in Greenfield, Dade county, a ball of ice fell, which weighed one hundred and sixty pounds.——In the London Lancet, Mr. Kimball records a case of Idiopathic Hydrophobia that terminated favorably.——A servant girl died at Exeter, N. H., week before last, in consequence of breaking a looking-glass accidentally. Believing that it forbode evil, she soon fell sick, and on the second or third day, without any other disease than such as resulted from fear, actually died a victim to an absurd superstition.——In the northern part of Vermont and in the vicinity of Exeter, N. H., scarlatina is very prevalent and fatal.——A Medical Board has been ordered to convene in Philadelphia on the 2d of May next, for the examination of Assistant Surgeons for promotion, and of candidates for appointment in the medical Staff of the Army. The Board is composed of Surgeon T. G. Mower, President; Surgeon H. A. Stinnecke, Assistant Surgeon J. M. Cuyler, Members.——For the purpose of replenishing their empty coffers, shops have been opened in London for the sale of German Medical Degrees, and as lures to the ignorant and indolent, they are said to be from old and celebrated Universities, and for a certain sum of money they can be had without examination, trouble, or absence from home. This is a new but dishonest method of raising the wind.——The University of Pennsylvania had 363 students and 114 graduates—valedictory by Professor Gibson. The Transylvania Medical School 271 students, and 57 graduates; the Louisville Medical School 262 students and 53 graduates; the Medical Department of the University of New York 239 students, and 51 graduates. Prof. Draper delivered the valedictory. The Medical College, of South Carolina 158 students and 58 graduates; the Medical College of Richmond, Va. 55 students and 16 graduates; Columbia College. at Washington, D. C. 20 graduates; the College of Physicians and Surgeons, N. Y. twenty five graduates; and the Willoughby University, Ohio, 7 graduates.——A case of acute rheumatism was cured in 48 hours by Mr. Malherbe who applied to the affected joints a solution of cyanid of potassium—10 grains to 1 ounce of distilled water.——At the Pennsylvania Medical College, during the past session, there were 83 students and

29 graduates; the Albany Medical College, 101 students and 27 graduates; the Geneva Medical College 211 students; the Medical Department of Yale College 47 students and 19 graduates.—In Braintree (Mass.) a fatal malady prevails, which baffles the skill of the physicians in that vicinity. All the peculiarities of that disease have not come to our knowledge, but we learn that those attacked suffer severe pain, live but a few days, and after death spots appear on their bodies. It is remarkable that none but females have been attacked. Only one has recovered, and the spots appeared on her body very slightly during her sickness.——It is said in the Westminister Democrat that a lady in that county, recently deceased, threw up from her stomach a short time before her death, a lobster about two inches in length, apparently such as are usually found in fresh water. It is supposed that she must have swallowed it in drinking while it was yet small, and that it occasioned her death. When it was ejected it was dead, and had probably been destroyed by medicine taken during the sickness of the lady.——W. A. Roberts, Esq., of Edinburg, records in the London Lancet, a case of fatal hæmorrhage from the extraction of a tooth. Every expedient that able men could suggest was resorted to ineffectually, and the patient died of a hæmorrhage of three weeks and two days duration.——It appears that illicit distillers and venders of whiskey in England, are in the habit of adulterating it with creosote, in order to impart to common spirit the celebrated peat-reek flavor. This is an adulteration of the most noxious nature, and will certainly produce death when taken in sufficient quantity, particularly in an excited state of the system. One death has already resulted from it.

To Correspondents.—The acticle of Dr. J. J. Bradford, on *Ergot*, and that of Dr. J. H. Johnson on *Osteo-Sarcoma*, shall appear in the June number.

THE

WESTREN AND SOUTHERN MEDICAL RECORDER.

EDITED BY JAMES CONQUEST CROSS, M. D.
Professor of the Institutes of Medicine and Medical Jurisprudence in Transylvania University, and late Professor of Materia Medica and Therapeutics in the Medical College of Ohio.

No. 8. LEXINGTON, KY. JUNE, 1842. Vol. 1.

THOUGHT'S ON THE BILIARY SECRETION.

BY THE EDITOR.

(Continued from page 308.)

If the elements of the biliary secretion are found in the refuse matter of the system, which by passing into the sanguiferous capillaries, causes arterial to assume the character of venous blood, and to possess, in consequence, less vitality; if the blood of the vena portæ differs from other venous blood, and owes its peculiarities to the great amount of effete matter admixed with it by which its vitality is diminished and its septic tendency is increased; and if the biliary secretion is a fluid which runs rapidly into putrefactive decomposition, and that the properties of cystic bile results from this process having taken place in it, it is evident that bile cannot be directly essential to chylification. If it is formed of effete matter, which has been removed from the textures because of its unfitness to sustain their physical structure, it is absurd to allege that it is necessary to the proper assimilation of the nourishing fluid that has just been extracted from the contents of the stomach, and is being carried into the circulation. This idea is not only at variance with a fundamental condition of all vital action, which is that the nourishing fluid should be kept free from all injurious admixture, but with the plainest dictates of common sense.

But let us see on what grounds this opinion rests. By Hunter it is said, it does not appear that there takes place an admixture between the bile and the digested aliment. The former passes

over the latter, never incorporates with it, and is expelled from the bowels in conjunction with the excrementitious part. This is the opinion of Abernethy. He remarks, that bile does not imcorporate with the digested aliment, "because the least quantity of bile will give taste and tinge to a very large quantity of other matter. The chyle is white and does not taste bitter. They say it has a sweetish taste; that means, I suppose, that it is not sour, or of a particular taste. It cannot, therefore, formally incorporate with the digested aliment, and positively it does not incorporate with the fæcal matter." By Saunders it is said, "a dog was fed with animal food, and in three hours the abdomen was opened--a portion of the *duodenum* and *jejunum* of considerable length, was cut open, so that the contents might be observed. Portions of food, reduced to a pultaceous mass, were seen oozing through the *pylorus;* the bile was likewise observed to pass slowly out of its duct, which, when carefully attended to, appeared to flow over the surface of the digested matter adhering to the intestine. Upon removing the bile from the surface of the digested matter, it did not appear to have mixed with it in any sensible degree."

If bile is necessary to chylification, its presence in the small bowels is indispensable, and if we find that process going on properly without it, the presumption at once arises that it serves some other purpose. Four cases are recorded by Andral in his *Clinique Medicale*, in which the ductus choledochus was obstructed either by a tumor or other body compressing it, or by inflammation of its parietes, and yet the process of chylification was not in the slighest manner interrupted or embarrassed. In jaundice bile does not pass into the bowels, and yet Dr. Gregory mentions many cases of individuals who laboured under it, who went about their ordinary business, and performed all the functions as in a state of health, eating, drinking and sleeping in their usual way. By Dr. Stokes we are informed, that he has seen persons who laboured under this affection for more than a year, and yet had all that time digestion good, their bowels regular, the flow of urine natural, and the circulatory, nervous and respiratory systems apparently conformable to the standard of health. I remember, he continues, two cases of protracted jaundice, in the persons of two male servants, who were admitted into the Meath Hospital, with symptoms of irritation in the upper part of the digestive tube. From this both recovered under

an appropriate treatment, but the jaundice continued in one for 18, and in the other for 16 months. One of them, a stout, well-built and fully developed man, came into the hospital some time afterwards in the apparent enjoyment of perfect health, except that he still had the jaundiced color. He wished to be taken into the hospital to get cured of his jaundice,stating that, in consequence of the peculiarity of his appearance, he could not get a place any where, and was in a very distressed condition." Under circumstances of health so perfect, there could have been no degeneration of the nourishing fluid.

In cases of malformation of such a nature as to preclude the possibility of bile, passing into the duodenum, we find that chylification has gone on without interruption. Thus two cases of children are recorded by Dr. Blundell, that lived for four months to all appearance in perfectly good health, and yet when they were opened after death, it was discovered that the biliary ducts terminated in a cul de sac, and that consequently not a drop of the biliary secretion had ever passed into the bowels. To Sir Everard Home we are indebted for a singular case of entire absence of the gall-bladder, and no opening in the bowels, and that too in an individual who had enjoyed good health.

With the view of determining how far the bile is concerned in the process of chylification, numerous experiments have been performed by different individuals and with somewhat varied results. Thus, while Sir B. Brodie affirms that chylification was invariably suspended by tying the cholcodoch duct, several other physiologists fully as much entitled to respect, not only deny it, but maintain that the lacteals and thoracic duct, were filled with chyle as abundantly as under ordinary circumstances. This was the result of the experiments of Magendie, of Laurant and Lassaigne, of Tiedemann and Gmelin, and more recently still of those of Phillips.

During the latter months of intra-uterine life, the liver forms bile, as is evinced by the abundant collection of meconium in the bowels; and it is very certain that before birth bile cannot be subservient to the process of chylification. Something similar is observed in the hybernating mammalia. The liver, in those animals during their torpor, secretes, yet no chyme is formed in the stomach for the bile to act on in the duodenum. There is a second digestion in the cœcum of herbivorous animals—chyme is formed in it, and yet during the time

that this is being effected, the cœcal valve prevents all communication between the cœcum and ileum, and consequently the bile is effectually excluded from the former until that process is completed.

The particular terminus of the choledoch duct in most animals, has been urged to prove that bile is necessary to convert chyme into chyle, it should, however, be recollected that, in some animals, bile is not poured into the duodenum. In some of the molluscous animals, the small bowels receive but a very small portion of the biliary secretion, and that too not at their upper, but at their lower portion. The greater part of the bile is emptied, either into the cœcum or very near the anus at points very remote from the seat of chylification. In such animals bile is evidently an excretion. It is known that a portion of chyme is absorbed from the stomach, and in the conversion of it into chyle, bile can have no agency. During the process of chymification, the pylorus is closed so as to prevent it from entering the stomach. When the portion of the food in contact with the internal surface of t at organ, has been changed into a state which fits it to make a proper impression upon the pylorus, and to cause its relaxation, bile cannot enter it then, unless we entertain the unreasonable supposition, that the duodenum performs two offices that are perfectly opposed to each other, at the same time. To cause the passage of chyme out of the stomach and its descent into the duodenum, the periestaltic action of the alimentary canal must be called into exertion. To cause the ascent of bile into the stomach, its anti-periestaltic action is requisite. These two actions must be going at the same time in order to convert the chyme absorbed from the stomach into chyle, for except when the former is passing into the duodenum, the pyloric orifice is closed.

It is contended that chyle is precipitated in the form of flocculi by the biliary secretion. This opinion is regarded by Tiedemann and Gmelin as erroneous. They maintain that when bile is mixed with the fluid contents of the stomach, no other precipitate takes place than that which is procured by the addition of an acid to bile—that the flocculi which have been considered precipitated chyle, are nothing more than shreds of mucus, and may be seen in the bowels even after the choledochus duct has been tied—that chyle is fluid, and that the somewhat tenacious matter which is found laying between the villi, and which it is said is coagulable, is

not chyle as many have supposed, but is nothing more than mucus.

By Muller it is maintained that the "picromel, has evidently some connection with the assimilation of the chyme, for it is not found in the fæces." Picromel is regarded by many physiologi ts as the bitter principle of bile, and so abundant and pungent is it that a very small quantity of bile will render a large quantity of fluid bitter, and as it is not in the fæces, it must therefore, according to Muller, aid in the assimilation of chyme. The same argument, however, proves that it cannot participate in that process, for no evidence of its existence in chyle has been adduced. Indeed Muller himself admits, that this is a legitimate conclusion, for he says, that some of the components of bile are certainly excrementitious, such as the resin of the bile, cholesterine, and the coloring matter of the bile, because "no traces of them are found in the chyle." The resin of bile is here admitted to be excrementitious, and when we recollect that Berzelius regards the yellow matter, resin and picromel of Thenard, as one and the same substance, and that if they are not the same it is extremely difficult to seperate the resin and picromel, so strong is their affinity for each other, we shall not be inclined to consider the inability of chemists to detect the former in the fæcal contents of the bowels, as showing very conclusively, that it has "some connection with the assimilation of chyme."

We desire to state here, what indeed should have been mentioned under another head, that picromel cannot be considered as certainly the cause of the bitterness of bile, because that of the fœtal liver is slightly bitter, and yet according to Lassaigne it contains no picromel.

Because the acidity of the contents of the small intestines diminishes as they approach the cœcum, it has been said that the acid is neutralised by the alkaline carbonate of the bile. This is mere conjecture, for there are various ways in which the gradual diminution and ultimate disappearance of it may be explained quite as satisfactorily as by ascribing it to the neutralising agency of the bile. If an alkaline secretion were poured out by the bowels, their acidity would disappear, and this has not been disproved; if the decomposition of the contents of the bowels were to produce an alkaline substance, it would happen, and this has not been rendered improbable; if the bowels were to absorb it, the same character of the fæcal contents of the bowels would be observed, and this no one has shown to be

impossible. These various points must be determined before it can be maintained that the biliary secretion neutralizes the acid of the chyme.

The eighth and last proposition we engaged to establish, is that *peristaltic action of the bowels is in no way dependant on bile.*

The truth of the prevailing opinion seems hardly to have been questioned by physiologists and yet there is scarcely one that has been more precipitately adopted, or which rests upon more scanty or unsatisfactory evidence. In the most original, if not the best work on physiology that has appeared for years, it is laid down as a postulate no longer open to controversy. We allude to that of Muller in which it is said that "the bile seems to be a necessary stimulus for the peristaltic motions of the intestines; for, when its flow is arrested, constipation is the result." Than this, no declaration could be more gratuitous and unfounded. With the exception of jaundice, and even in that disease, costiveness is not uniform, torpor of the liver produces a greatly increased irritability of the bowels, which is invariably abated by the abundant afflux of bile into them. But we will not discuss this topic again. We have, already, in treating of Cholera Infantum, in the 5th No. of this Journal, rendered the prevailing opinion sufficiently improbable, to which we refer the reader.*

We would suppose that the considerations, already presented, and perhaps in somewhat tedious detail, ought to be sufficient to bring conviction to the mind of every candid physiologist, that the liver is exclusively an excretory organ, the design of which is to rid the circulation of matters, which if retained, would prove more or less prejudicial, and we would conclude the argument here, but for our desire to show how fully and satisfactorily this view of the subject is illustrated and enforced by Pathology and Comparative

*So long have we been in the habit of maintaining that bile allays instead of increases the irritability of the bowels, that its action on them is *sedative* instead of being stimulant, that it is hardly necessary to disclaim indebtedness to other writers for the views we entertain. It may not, however, be superfluous to state that the work from which the following quotation is made, and which we adduce with much satisfaction, in corroboration of the correctness of the opinion alluded to, is the only one with which we have met, in which we have found this idea suggested, and that it was not seen by us until after its republication in the "*Select Medical Library and Bulletin of Medical Science*, of Dr. Bell, for last April We refer to the treatise of Dr. Dick, *On the Organs of Digestion*, in which it is said: "I am quite convinced that healthy bile has a *sedative* effect on the intestines, and that deprived of its presence, or supplied only with a vitiated and inefficient sort of it, the mucous membrane becomes irritable, and a constitutional malaise and febrility, causing a dryness of skin, heat, and nocturnal sleeplessness, are the sure sequelae."

Anatomy and Physiology. Without indulging in numerous details, we shall merely draw attention to a fact that is admitted by all, which is that diseases of the lungs are most common in high northern climates, while those of the liver prevail almost exclusively in low southern latitudes. The pulmonary and hepatic apparatuses are to the two leading emunctories of the system, and are placed at the extremities of the venous circulations, where it is presumable such matters, as should be excreted, are accumulated in the greatest abundance. Now the excretory function of the skin is closely associated with the functions of both of those internal excretory organs—so much so indeed that a change in one for the better or the worse, cannot take place without being felt to a greater or a less extent by the others. Thus, if cuticular action is energetic, there will be an abundant hepatic secretion, but a sparing pulmonary exhalation; if cuticular action is enfeebled, there will be a languid secretion of bile, and a determination of fluids to the lungs; if there is diminished action of the hepatic, there will be increased action of the respiratory apparatus, and vice versa. External temperature is the most powerful known cause of these various modifications. When it is high the skin and liver act freely, and then a diminished amount of excretory duty devolves on the lungs, but when it it is much reduced, the functions of the former are languid, while that of the latter is energetic. Over exertion of any organ is a common cause of subsequent enfeebled, and often of suspended action, and consequently of disease. Thus in cold climates, from the moderate functional exertion of the skin and liver, the principal excretory duty falls on the lungs, and thence the frequency of pulmonary complaints in northern regions, but in tropical climates this labor falls on the liver, and thence the frequent and fatal abdominal diseases so characteristic of Southern latitudes. In temperate climates, such, for example, as that of Kentucky and most of the middle States, the blood is freed from its impurities in about an equal degree, by the liver and lungs, and consequently we have rarely either the pure liver or lung diseases, so common in northern or southern latitudes. Both the hepatic and pulmonary elements are distinctly observable in a great majority of the cases of disease that occur, and the physician who does not keep these facts constantly in mind, or is too exclusive in his pathology or therapeutics will surely find to his cost that he has misapprehended the character of the enemy with which he has to contend. Respiratory or biliary de-

rangement is manifest in every case, and both are present to a greater or less extent in almost all, so that an exclusive attention to the one or the other, is certain to increase the mortality of disease. But we cannot more fully dwell on these principles at this times—so important, as we conceive, in pathology and therapeutics—their illustration will constitute a subject of practical interest in some future article.

That the biliary and respiratory organs are depuratory and co-operate in freeing the blood of matters that should be eliminated, seems to be a conclusion fairly deducable, from the facts disclosed by comparative anatomy. It has been ascertained that as a general rule, those animals in which there is an extensive respiratory apparatus, there is a small biliary organ, and vice versa. Thus by Dr. Carpenter we are told, that among the Insect tribes, the liver is but little developed, and it would seem that it is altogether subordinate to the urinary system, which has been erroneously considered a portion of it. It is not difficult to account for the low condition of the liver in these classes; since the extensive amount of the respiratory function, must render almost unnecessary any other method of discharging carbon from the system. It is not among all the articulata, however, that the liver appears a subordinate organ; for in the Crustacea, whose respiration is aquatic, and therefore less energetic, it attains a very considerable size, occupying frequently a very large part of the abdomen, and in one or two species acquiring a spongy texture by the union of its minute subdivisions into one mass, so as to resemble in some degree the solid form which this gland presents in higher animals. The liver usually presents in the Molusca a very large size and highly developed condition, which may be fairly regarded as compensating for their feeble respiratory powers. The liver is of a reduced size in birds, but this apparent deficiency is not felt by them, as the respiratory apparatus presents an uncommonly extensive developement. Between the liver and lungs of the Mammalia we do not observe that remarkable disproportion which seems to be characteristic of most of the inferior orders of animals—they are of medium size, and in proportion to the bulk of the animal in which they are found. The depuration of the blood, therefore, under ordinary circumstances, is devolved neither mainly nor exclusively upon the one or the other—it is the result of their joint agency, neither of them ever performing extraordinary duty, except from the force of known causes, and then disease is very apt to follow.

OBSERVATIONS ON THE SECALE CORNUTUM.

BY J. J. BRADFORD, M. D. OF AUGUSTA, KY.

Nearly thirty years have been consumed in the active discussion of the action of the Secale Cornutum, on the gravid uterus, and yet, whether or not it exerts a specific influence over that organ has not been positively determined. The weight, however, of obstetrical testimony, is, I believe, in favor of the opinion that ascribes to it a specifiic tendency to awaken and invigorate action in that organ, when it is given at the termination of utero-gestertion. By some it has been objected to, on account of the supposed deleterious influence which it exerts over both the mother and child. But this objection does not seem to be well founded.—Many obstetricians of large experience, who have given it in every stage of labor, not only declare it to be perfectly innoxious, but consider it the surest and safest *partus accelerator* to be found in the materia medica. It is proper, however, to state that several other obstetrical writers of equal authority, have charged it with being occasionally productive of the most unpleasant effects. It has been said that it destroys the child—produces hour-glass contraction of the womb, and thus retards and embarrasses the delivery; and if this is true instead of being eulogised as the '*pulvis ad partum*,' it should be denounced as the '*pulvis ad mortem*.'

Without obtruding upon the reader a critical examination of the contradictory opinions, to which reference has been made, I will simply state the results of my experience in relation to the article under consideration, as a *partus acceleration*, and then pass on to the illustration and explanation of the particular object of this paper. Since 1830, I have delivered 587 women, and of that number the Secale Cornutum was given to 48, or to one in about fifteen. Of the 48 children but one was still-born.

When there is no malformation of the pelvis, the os uteri soft and dilatable, and the pains feeble and inefficient or intermittent, and the head, feet or breach presents favorably, I give the secale cornutum in doses of one drachm every hour, until there is unequivocal indication that its specific parturient effects are being felt by the uterus. When the skin is cool and the pulse feeble, the action of the ergot is rendered much more prompt and certain, by adding

to it a small quantity of brandy, or what I greatly prefer, a drachm of piper nigrum, in the form of decoction. Indeed, I have used the latter article alone in several cases, and with very decided advantage.

As has been hinted, it is on the the anti-abortive agency of ergot that I wish in this paper to dwell. My opinions have resulted from observations made during several successive years, and in giving them to the public, some may consider my conduct indiscreet, if not inexcusable. So far as my reading has given me information on the subject, no author has ascribed properties to the ergot, such as repeated observation has convinced me it possesses, and although my opinion may appear dangerous, I ask no other indulgence than an impartial examination of the cases which I am now about to record.

It is proper, however, to premise before giving the cases, that although much diversity of opinion exists among obstetrical writers, as to the specific action of ergot on the unimpregnated uterus, nearly all of them concur in the belief, that when it is given in the early months of pregnancy, abortion will be produced. Than this, judging from personal observation, I am disposed to assert, that there cannot be found a more untrue or untenable opinion. It is no less absurd than it would be to contend, that because tartar emetic excites nausea, it must invariably produce vomiting, or because mercury exerts a specific action on the liver, it must uniformly promote the secretion of bile. Experience and observation soon teach the physician the error of such sweeping generalizations. Few doubt that there are, what is called specifics, and that they produce particular effects on certain organs, but it is known that, in certain states of those organs, these effects will not be produced. This is precisely the case with ergot, and having made these remarks, I proceed at once to state the conclusions to which I have arrived in regard to the secale cornutum.

First: When ergot is given at the close of utero-gestation it increases decidedly the parturient efforts of the womb.

Secondly: That when given at any time before the expiration of the fourth month of gestation, it will not increase uterine pain or contraction.

Thirdly: That instead of producing abortion, in the quantities in which it is usually given, it is, on the contrary, one of our best and

safest means of preventing, and counteracting it, and of conducting the pregnancy to the full term of gestation.

Fourthly: That it exerts no unpleasant effect on the fœtus in-utero.

The second and third conclusions above stated, will, I am aware, astonish many, particularly those who are satisfied to abide by the uncertain statements to be found in books, and I confess that for several years, I had full faith in the opinion, that ergot would produce abortion. In several instances in which there was no rational hope of conducting gestation to its full term, I gave ergot, and was always disappointed in the effects that were produced. I was astonished to find that it excited no parturient effort. I often gave large doses, and to my astonishment, instead of abortion being precipitated as I expected, the cases progressed without interruption and happily to the full term. At last accident convinced me of what experience had suggested, but had not confirmed. A lady consulted me, complaining that she had taken cold, and that she, to use her own expression, "had not been right since," and wished me to prescribe for her. I questioned her closely, as I suspected her situation, and she finally confessed that she was in the third month of pregnancy. I ascertained that she had made several efforts with the ergot, in large doses, without producing any uterine pain. She was now informed that if she made any further attempt to accomplish her murderous purpose, I should feel myself bound to inform the proper authorities. She went to the full term of pregnancy, and I delivered her of a healthy child.

In 1834, and subsequent to the above case, I received a note from Miss B.——containing a most melancholy narrative of an accident that had befallen her some three months previously. In a word, she asked for means to expel the ovum. I requested and obtained an interview with her, when she informed me that she had been advised by an old midwife to use the "Blasted Rye," and that she had taken three or four teaspoonful doses without any sensible effect whatever. I informed her of the criminality of such efforts, and that she rendered herself liable to criminal prosecution for the same. She went to the full time, and was delivered of a healthy male child.

In June 1836, I was called in haste to see Mrs. B. the wife of a clerk in a large manufacturing establishment. She was of medium

size and sanguine temperament; then with her second child; and to use her own phrase "two months gone." She had been out upon a visit, and a thunder-storm coming up, she made great exertions to reach home, by which she heated herself very much.—Soon after reaching home there was such a gush of blood from the vagina as greatly to alarm her, as well for her own safety, as that of her offspring. When I reached there, I found that the hæmmorrhage had been very profuse, and that the slightest exertion increased it. Bleeding was out of the question, from her state of prostration, and cold applications exerted but a temporary effect. An examination per vaginum, detected many coagula of blood, and a partial dilatation of the os uteri. Believing that abortion must take place in spite of any efforts to prevent it, and believing also that the sooner it was accomplished the better for her safety, I administered a drachm of the secale cornutum, in the form of decoction. An half hour passed; an hour elapsed, and no uterine pain or contraction came on, but the flooding was sensibly diminished. A second drachm was given, which arrested the flooding, but produced no expulsive effort on the part of the womb. No uncomfortable feeling was produced, except some nausea and a sense of tightness in the region of the womb. I directed a third dose to be taken during the night, if any symptoms of hæmmorrhage returned. She was very much exhausted from the loss of blood, and gentle stimuli were allowed every half hour. At two o'clock that night the flooding returned, and she took the fourth dose, which put a stop to the loss of blood. After the fourth dose was administered there was no return of the hæmmorrhage, and the treatment consisted in ordering the recumbent position, cooling laxatives and a moderate diet. Nothing unusual occurred to her until the 15th of December following, which was seven months, lacking five days, when I was summoned in haste, and found her in labour. The labor proceeded very slowly for 24 hours. The parts being well relaxed, the head presenting, and the pains feeble.

I gave her one drachm of ergot in decoction, which in twenty minutes produced strong labor pains, and in one hour she was delivered of a healthy male child. I should state that the ergot given, was out of the same lot as that administered to her, when she was threatened with abortion, and therefore, the difference in the effect produced, could not have depended upon one being a

good article, and the other having lost its active properties by age.

In the fall of 1838, I was summoned in haste to a negro woman, the property of Mr. J. She had been flooding profusely for some hours; she was then about the beginning of the fourth month of pregnancy; the loss of blood had been very great, unaccompanied with uterine pain—the ergot was repeated in teaspoonful doses every hour, until three had been taken, when the hæmorrhage subsided without any pain having been produced. This case afterwards did well, and six months afterwards she was delivered under the use of the ergot of a living female child.

Other cases of like character could be cited, but as it is necessary to consult brevity, I shall here close this paper, by alluding to a case that came under my treatment, somewhat of a different character. In the same year of the last reported case, I was called to a lady aged about 40, in the fourth month of gestation, who had been loosing blood at intervals for some two weeks. She was now much exhausted and unable to have her head raised from the pillow without fainting. An examination detected the os uteri dilated, and a small sized fœtus engaged in it. There being now no pain, the ergot was administered with the hope that it would enable the womb to cast off its contents. In this I was foiled, and had to make use of manual force to accomplish my purpose. The placenta remaining and the loss of blood being considerable, a second dose of the medicine was given with a glass of brandy. Under the use of the brandy, the flooding was sensibly increased, and I now thought my patient would sink in spite of all efforts to save her. Her face and lips became completely exsanguine, and her voice inaudible. The parts being, from the loss of blood, much relaxed, and she almost insensible, the hand was gradually introduced into the womb, when I detected, what I had not before suspected, a well defined "polypus," of about the size of an unhulled walnut, with a very narrow foot-stalk, attached to the fundus of the uterus. Rather than lose any time in efforts, which might prove abortive, to secure it by ligature, and run the risk of its irritation, by being left in the womb for several days, I determined while my hand was in the womb, to try and extract it, upon a similar method to that of extracting polyp from the nostrils by means of the forceps. To accomplish that purpose, I secured its neck between my thumb and finger nails, and by bruising and lacerating it, gradually suc-

ceeded in bringing it away with the placenta. No hæmorrhage of any consequence followed. Stimulants were now used to sustain the patient, and under their use, together with beef tea, and small doses of the acetate plumbi and opium, she gradually recovered, but she has not conceived since, although there has been no return of the polypus.

This case is interesting upon two accounts—1st: Because it shows the inefficiency of the ergot in the early months; and secondly: Because it establishes the fact, that pregnancy and polypus can exist in the uterus at one and the same time.

I have no theory to advance in explanation of the facts here stated, and I offer them to the medical public, with this single remark, that my only object in placing them before the profession, is to elicit more attention to this most singular drug.

With the hope, Mr. Editor, that you, or some other individual, may take up this subject, and give us some more practical and definite rule for its administration, than we have, I shall close this article.

EXTRAORDINARY CASE OF OSTEO-SARCOMA.

BY J. HAMILTON JOHNSON, M. D. OF SHAWNEETOWN, ILL.

On the 26th of March last, I was called to visit Miss N. D. aged 19, of White county, who was labouring under the above disease, located in and about the bones of the knee.

I ascertained that about six years since, she was slightly injured in the leg from a fall, immediately afterwards she was attacked with lancinating pains of the parts, some swelling, apparently at first confined to the integuments, fat, and fascia. She continued to walk, and attend to her business for three years, when she discovered, that the bones began to manifest by the touch some uneveness and enlargement, which continued to increase gradually and regularly up to the time when I visited her.

At the period when I was consulted, she had been confined to her room and bed for about 18 months. The bony enlargement, with the integuments was enormous, measuring 29 inches in circum-

ference, occupying the whole of the upper part of the tibia and fibula, the patella and lower extremity of the femor. The vessels were in a varicose state.

The whole limb, from necessity, had remained immovable, until from pressure on the heel, the integuments had sloughed, and laid bare the os-calcis. The ancle and medial portion of the leg natural. The flesh above the bony enlargement upon the femor, much swollen to the hip joint, pains excruciating, without intermission.

She stated that with the gradual enlargement of the limb, the pains became more aggravated and permanent. She had regularly been kept under various modes of treatment, as prescribed by several neighboring physicians, and at one time even subjected to the *mighty influence of steam, No.* 6, *etc.* all, however, without material or even partial benefit.

Dr. C. R. Smith, the attending physician for the last 18 months, had used all the remedies suggested by Cooper, Gibson, and others, in such cases; such as mercurials, iodine, hyd, potassa, counter-irritants, sarsaparilla, etc. etc.

I found the case desperate, and amputation the only remedy. It was of course determined upon. I made the incision about midway of the femor—she lost but little blood, and stood the operation well. Drs. Smith and Sebastian were my assistants. Although she was much emaciated, naturally small and delicate, yet when the limb was amputated, the tumor weighed 22lbs. She is doing well, and no doubt exists in my mind in regard to her recovery. I have preserved the limb, and design presenting it to some of our Medical Institutions.

PATHOLOGICAL REMARKS.

In referring to the nature of this case, I cannot agree with many of my compeers. I would observe, that its formation appeared to me to be perfectly independent of any constitutional diathesis.—She did not exhibit the slightest symptoms of a scrofulous habit, and is one of a large family, all of whom enjoy good health. Nor can I agree, with many eminent surgeons, in supposing that all osteo-sarcomatous tumors, are identified, as possessing malignant characters, or belong to the same family with cancer and fungus-hæmatodes, diseases so intimately connected with a morbid state of the constitution, and which so frequently disease the adjoining parts, that

the knife seldom holds out inducements, upon which to calculate a cure.

This case, undoubtedly, was caused by injury, and appeared to me to be strictly local, inasmuch as the external integuments, and internal parts, with which the tumor was in contact, were perfectly healthy, and not at all affected with it. Had the patient been laboring under a constitution impaired by some general disease, then I should readily have admitted, that it might have possessed a malignant character, and that the removal of the limb, would not have prevented a return of the disease.

But as she was in possession of good general health which had not been broken up by any constitutional affection, I was induced to believe, (what has so far been verified,) that amputation would prove successful.

HINTS ON THE CULTIVATION OF THERAPEUTICS.

BY THE EDITOR.

This article is designed to illustrate and enforce the importance of studying the influence of atmospheric constitutions, in modifying diseases, and in counteracting and promoting the efficacy of remedies. Atmospheric constitution is a term which is used to denote a certain state of the air, which is of indefinite duration and of variable extent; the existence of which is soon made manifest, by the unusual prevalency of a particular order of diseases. The relations which subsist between certain states of the atmosphere and the prevalence of such diseases as present a family physiognomy have, at various epochs, been closely studied. Of those who have paid most attention to this subject, we may mention the names of Sydenham, Baillou, Baglivi, Stoll, Sarcone, Van Swieten, and Fouquet.

It must not be inferred that we, in the remarks we shall make, have reference to those states of the atmosphere which appear to be able of themselves to give rise to, and to be the almost exclusive medium, of the propagation of certain determinate forms of disease. Nor do we design to speak of the influence of epidemic

or endemic constitutions. By atmospheric constitutions, we understand those states or conditions of the air, which, by an influence exerted upon individuals, not only give rise to diseases that have a general family likeness, but which cause the diseases already existing to put on, to a greater or lesser extent, the character of those which, through atmospheric agency, have supervened upon them.

The study of the particular modifications imparted to disease, by a prevailing constitution of the atmosphere, is a study of exceeding importance, in a therapeutical point of view. It was so regarded, by the ancients, and we cannot consequently, see the justness or generosity of the contempt with which their practical suggestions have been too generally treated by modern physicians. With them it was a fundamental dogma, that diseases changed their character, and assumed strange and unfamiliar peculiarities, that corresponded with the prevailing constitution of the atmosphere. These states of the atmosphere they studied in the effects they produced, that is pathologically, rather than in their nature. Indeed, of the latter, they knew nothing, nor can the moderns boast of a higher degree of enlightenment on the subject. Of their existence, however, they entertained not a doubt, and every physician of experience and observation knows that their admission and appreciation is of fundamental importance in the practice of physic. Nor is this all. Not only did they know that the character of disease is changed by the prevailing constitution of the atmosphere, but they were familiar with the fact that all intercurrent affections that occur during its existence, are so modified as to yield only to the remedies that are found successful in subduing the prevailing disease. Thence arose the great therapeutical principle upon which the older physicians successfully acted, and which consisted in deducing the treatment of local maladies from that of the concomitant disease. This was the line of conduct pursued by Hippocrates, Sydenham, Stoll and of all those who have effected actual improvements in practical medicine, and will be that of all those who shall hereafter contribute, by their exertions, to render the treatment of disease more safe and certain.

It is admitted that atmospheric constitutions impart modifications to diseases, but they have been as all will admit, too much neglected by modern physicians. Their study, however, is not only important

but indispensable, as a knowedge of them will soon teach the physician that the experience he may have acquired in the treatment of sporadic cases, will not, in all cases, avail him, when he is called to contend with an epidemic. The facts he may have acquired, will not serve him as authority on which to act, or data from which to reason. Every new epidemic is a new subject of study, and new facts must be accumulated. These will soon enable the sagacious and attentive physician to decide upon its nature, gravity and treatment.

Although our knowledge of the nature and treatment of sporadic cases, will not enable us to manage, with success, an epidemic, it will very much facilitate the study of it: for an acquaintance with a disease in its sporadic state, furnishes us with a very important element in judging of it when it assumes an epidemic form. Thus we invariably institute in the commencement of an epidemic, the treatment which was found most successful in sporadic cases. Unfortunately this has too frequently proved unavailing, and then physicians have without reflection pronounced the epidemic more malignant than the sporadic disease. Now, the malignity of a disease must be in proportion to its tendency to death, and cannot with any propriety be inferred from the mere failure of the sporadic treatment. This may be owing to a slight modification of the complaint, produced by the constitution of the atmosphere, which has not increased the tendency to death. That this is not improbable, is proved by the fact that remedies, different from those employed in sporadic cases, but not more prompt or powerful, have often succeeded after the latter had failed.—Among other instances illustrative of this, we may mention the yellow fever of 1793, that prevailed in Philadelphia, and which yielded readily to occasional small doses of calomel and jalap, but resisted every other kind of medication. The same fever has been treated in the same way, in the same and other places, since that time, but never with the same results. To infer malignity, therefore, from the failure of preconceived modes of treatment is illogical and absurd.

Here we cannot refrain from pointing out another evil of systems in medicine, in addition to the many we have, on several other occasions already noticed. Systematic views of disease never fail to abandon us, when we are required to encounter an epidemic. Not

having been deduced from an observation of disease on a large scale, and under all its modifications they never have been and never will be able to anticipate the peculiarities of an epidemic, upon a knowledge of which, as all experience goes to show, its successful treatment depends. Nor will the systematist profit much by his experience in regard to epidemics. He enters into the contest with preconceived notions so firmly fixed that continued defeat cannot eradicate them from his mind—and with such a predetermination to see only what favours his peculiar views, as effectually to prevent him from arriving at any thing like truthful results.

Epidemics are not less numerous than they are diversified in character. This is so strictly true, that no physician has ever yet lived long enough to see two of them that were perfectly identical in their nature. Though their general features may have been considerably resemblant, they have invariably presented such peculiarities, as to constitute each of them distinct individualities, and to require for each of them a particular treatment. When, therefore, in the treatment of an epidemic, we find the remedies employed with success in sporadic cases prove inefficient, our only safe resource is in a careful study of the writings of the older authors, and of such of those, as have seen what they have described, and knew what they would have you understand. This, however, is not always an easy task. The search into their writings for facts will be found more or less embarrassed by the hypothetical explanations with which they are obscured and disfigured. Of these, however, they should be striped and then compared, not only with the facts found in the writings of others, but with those the physician may have himself observed, in regard to the epidemic which he is treating, and of which he would be instructed. From these sources of information he should deduce that therapeutical method, which promises the most success, regardless of any preconceived notions that may have been formed on the subject, and it should be adopted without hesitation, even though it should prove utterly subversive of the most cherished opinions.

Few will, I presume, doubt or deny, that the various constitutions of the atmosphere, impart to diseases equally varied modifications. This opinion, I at a very early period imbibed from the study of the writings of the older authors, and the more I have observed

and reflected on the subject, the more have I been convinced of its truth; and that we should with the ancients, consider it of fundamental importance in the practice of physic. Holding such sentiments it would be surprising if we were to entertain any other than the most uncompromising hostility towards all the systems in medicine that now or ever did prevail. Their authors, knowing nothing of atmospheric constitutions, and conceding to them no influence over disease, their whole aim has been to localize maladies and to subject them, in all their various forms, and under all circumstances, to a uniform mode of medication. To exhibit in a strong point of view, the errors and absurdities into which exclusive opinions are sure to involve the physician, we shall adduce a striking illustration.

There is no disease that is more perfectly uniform in its chararter, or that exhibits pathological lesions more invariable than pleuro-pneumonia. If, therefore, there is a single malady which should be treated in all places and under all circumstances in the same way precisely, it is certainly the one to which we have adverted. Now, do the results of experience confirm the truth of this *a-priori* conclusion? No one whose opinions are based upon experience and observation will respond in the affirmative. During one season, we find the lancet perfectly omnipotent, but during another, it is almost wholly inefficacious. During one year, emetics produce very beneficial effects, but in another they appear to be rather hurtful than otherwise. At one time vesication acts like a charm, but at another it is either useless or pernicious. Look into the works of Sydenham, Sarcone and Stoll, and these allegations will be found abundantly verified. Even within the last few years, and since the study of the influence of atmospheric constitutions on disease, has been neglected, if not in a good degree abandoned, facts have come to light that are equally conclusive and illustrative of the point under consideration. We are told by M. Gasc, that in 1830, blood-letting in peripneumonia, was almost inefficient, but that during the previous year, it was productive of the most decidedly beneficial results. In 1814, says M. Rostan, this disease produced great mortality amongst the Cossacs, so long as the lancet was used, but when it was abandoned and stimulants substituted, it ceased to prove fatal. The curative action of contra-stimulant doses of tartar emetic, seems also to be very much under the influence of atmospheric constitutions, for it is said by M. Bricheteau, that although that article produced the most

satisfactory results in Necker Hospital in 1831, it was found towards the close of 1832 and the commencement of 1833, to be almost wholly ineffectual in controlling the disease.

In small-pox, blood-letting is generally productive of good effects but M. Bally, speaks of an epidemic variola in which the detraction of the smallest quantity of blood was almost certainly fatal. During one year, says M. Désormeaux, the Pommade d'Autenreith, performed wonders in hooping-cough, but the year following it did no good whatever. These facts clearly establish the important therapeutical principle, that the treatment of disease must be modified to suit the prevailing constitution of the atmosphere.

Not only is it true, that atmospheric constitutions produce such modifications in disease, as render the treatment of one year different from that of another, but it is also true that a particular constitution may persist through a series of years, although the seasons, through successive years may present their ordinary characteristics. Then we have what Syndenham calls a stationary constitution of the atmosphere, which renders some feature of disease more frequent or more prominent, and consequently more important, than under other circumstances. Of the truth of this evry experienced physician in this country, who has paid close attention to the diseases that have prevailed for the last fifteen years, must be satisfied. About ten or twelve years ago the constitution of the atmosphere changed from what it had been for nearly twenty years prior to that time, and during both of those periods the prevailing constitution imparted a peculiar character to the diseases that occurred. The treatment which the former rendered popular, has been found much less efficacious during the latter. The former constitution commenced, or was distinctly manifested in 1813, when what was called the Cold Plague, broke out and produced very considerable mortality. In the treatment of that disease, purgatives and calomel in particular were found to be more successful than any other treatment that was resorted to. This brought purgatives into notice, and as the febrile affections that occurred from 1813 to 1830 partook very decidedly of biliary disorder, they continued during the whole of that period to command the almost undivided confidence of the profession. About 1830 the constitution of the atmosphere changed, and that which was then introduced appears to have continued until the present time.

This I allege from the fact, which must have attracted the attention of every observing physician, that the character of disease at that time changed. Since 1830, fevers have evinced less decided biliary disorder, while the indications of gastro-enteritis have been more striking and unambiguous, while they have been manifested at a much earlier period than formerly. In the febrile reactions an obvious difference, in these two periods, has been observed. During the former, it was strong, regular and more enduring, but during the latter it has been feeble, irregular and manifestly typhoid. Nor have the results of treatment, particularly in the hands of those physicians who have not modified it in accordance with the change in the constitution, been less dissimilar. Purgatives, we have said, were remarkably successful during the former period, but they have not been so during the latter. It would be vain to attempt to disguise the fact, that fevers have not been managed with any thing like the success for the last ten or twelve years that they were formerly, and this I am persuaded is mainly, if not exclusively, ascribable to the excessive employment of cathartics, for they are the only medicines that have been used by the generality of physicians.

So great indeed has been the mortality from fever, that as some excuse for the inefficiency of the treatment followed, physicians have considered it expedient to designate it by a name that implies great malignity. We rarely hear of a fatal result, but we are told that the victim died of Congestive Fever. This, however, cannot have been the case often—the cases that we have seen, have been almost uniformly of that sort which modern writers call typhoid, and the testimony of others whose opinions are entitled to confidence, is of the same import. This being the case, the mortality of which we have had so much reason to complain for the last several years, must, therefore, be owing to some other cause than the malignity of the fevers that have prevailed. And when we think of the pathological condition of the mucous membrane of the bowels in typhoid fever, and of the action of purgatives, particularly of those that are drastic, we cannot be at a loss to conjecture what must have been the consequences of the cathartic treatment—a treatment that finds no excuse in pathology or therapeutics.

Not only do atmospheric constitutions impart modifications to disease during their continuance, but those that occur after their dis-

appearance, seem to partake more or less of those modifications, and yield with promptitude to the same remedies. This is an important consideration, and should not be forgotten when we are called to manage maladies that have originated during the continuance, or about the time of the cessation, of an epidemic. In illustration of this remark, we may state on the authority of M. Mestivier, that intermittent fever prevails in Moscow with great regularity twice a year; i. e. in the summer and in the autumn. In 1809, it was much more prevalent than usual, and then, although during previous years it had yielded promptly to cinchona, it resisted it, though given in large and frequent doses. In that city, there was a physician, of no reputation, who commenced the treatment of nearly all diseases with the *Potion de Riviere.*" The intermittent of 1809, he treated in the same way, and was perfectly successful. This fact coming to the knowledge of M. Mistivier, he immediately acted upon it, and at once subdued a disease which had resisted all his previous efforts. Sometime afterwards, he was called to a lady who had been suffering, for the space of a year, under a quartan fever. Every known remedy had been resorted to ineffectually, and learning that the disease had made its appearance at the time when intermittents had resisted cinchona, he administered the "*Potion de Riviere,*" and with entire success.

From these considerations, it is easy to perceive that there is nothing positive in the effects of medicines; that their efficacy depends, in a very great degree, on their perfect adaptation to the precise nature of the disease and the particular state of the system at the time of their exhibition. For these reasons, it is very difficult to put a proper estimate on their remediate power. Slight modifications, often inappreciable, produced by certain atmospheric constitutions, may cause agents of established character to fail in producing their usual results, and to cause others, of no reputation, to be highly valued; thus verifying the remark that we should hasten to employ a remedy while it cures, or in other words, while the constitution of the atmosphere continues that renders it efficacious; for when thai is succeeded by another, it is almost sure to fall into complete desuetude, or if persevered in, under a different constitution, as purgatives have been in this country, it may not only prove useless, but injurious.

Seeing, therefore, to what an extent the efficacy of remedies is controlled by modifications of disease produced by certain states of the atmosphere, we should regard every new epidemic, as one of the peculiarities of which we have no knowledge; that we should act cautiously and study them closely if we would obtain a conquest over it. This was the principle upon which Sydenham acted, and he informs us that he invariably lost a number of his patients in the commencement of every new epidemic—that his previous experience was a very unsafe guide in practice, and that he had to study its peculiarities and understand its nature before he could command success. This was not a difficult task for a mind constituted like that of Sydenham's; he had no preconceived impressions to shake off—no prejudices to overcome, and no interest to subserve other than that which kept him in the line of strict duty. Not so, however, with the slave of system—he looks merely that he may observe what others pretend to have seen—he reasons not, because of that his subservency has rendered him incapable, and he changes not his treatment because of its unsuccessfulness, for that would be to confess that he had been in error. Now, from what has been said, it is manifest that although it is proper in treating an epidemic to make use of the experience acquired in our intercourse with sporadic affections, it should be appropriated with great caution, and not with a confident assurance that it will carry us safely through the struggle—that while we study with assiduity its nature, we should observe with great closeness the effects of the remedies, we employ and change them on the first strong intimation that they are either useless or injurious. This the dupe of systematic medicine rarely if ever does;—his principles of action he has formed or adopted, and he is generally so infatuated with them that they blind him to the evidence of his senses, and render him inaccessible to the fiercest assaults of reason. Thence we find that the treatment of disease enjoined by one system of medicine is about as successful as that of any other; and that not one of them has ever effected any real improvement in the practice of physic. And this leads us to notice a change that has been made against medicine with as little truth as reflection. We allude to the allegation which maintains that the treatment of disease followed in one age differs fundamentally from that of an-

other—that the science is perpetually experiencing revolutions, and every successive change has left it exactly where it found it. This is true in regard to those who have been cheated and deceived by systems in medicine, but not of those who have taken observation for their guide, and when it is applied to the profession, in general, it must be looked upon as the offspring of misapprehension or malice.

Although it is evident that every age must have had its peculiarities, it is equally undeniable that the treatment of disease in every age, amongst physicians of observation, has been fundamentally the same. The descriptions of disease which are to be found in ancient books are so accurate, that no modern physician who has studied them with care, could be in doubt as to the forms of morbid action to which they refer. Nor are the rules of diagnosis and prognosis which we find in them, in regard to the generality of maladies, different from those that are taught, at the present day, in those schools in which systematic medicine has not obtained a firm foothold, while our indications are really the same, and they are followed from nearly the same motives that guided and prompted ancient physicians. These asser tions are proved, by all that has been left us by every observing physician that has existed since the time of Hippocrates to the present moment. Few better guides in practice can be found than Aretius, Alexander Tralles, Aetius, Coelius Aurelianus, Celsus, Galen and Sydenham. Nor is there any modern physician who deserves to rank with those illustrious masters that has attained that enviable distinction by any other means than the close imitation of their example.

In all ages, inflammatory affections have been treated by bloodletting and the antiphlogistic regimen; gastric repletion and other disordered states of the stomach by emetics; constipated and over loaded bowels by cathartics; spasmodic affections and other rigid states of the body, together with deficient or arrested cuticular action by tepid or hot baths and antispasmodics; and feeble and relaxed states of the system by cold bathing and tonics. Indeed, there is not a disease that is uniform in its character that is not treated now by the same remedies, or remedies of the same general character, that it was formerly.

We deny, therefore, that the leading indications are constantly fluctuating, and that the treatment of disease through a long suc-

cession of ages has been perpetually changing. This is true of those who have been guided by systems in medicine, but not of real practioners—physicians of observation. Occasionally we find tha tthe latter differ on some points that are comparatively unimportant; but when we reflect on the great number of subjects in regard to which there is observed amongst them an almost perfect unaminity of opinion, we must be convinced of the eternal regularity of the laws of nature and of the immutable certainty of the art.

BIBLIOGRAPHICAL NOTICES.

Lectures on the Diagnosis, Pathology, and Treatment of the Diseases of the Chest. By W. W. Gerhard, M. D. Lecturer on Clinical Medicine to the University of Pennsylvania, Physician to the Philadelphia Hospital, Blockley, to the Philadelphia Dispensary, &c. Philadelphia: Haswell & Barrington. 1842. pp. 158.

With a copy of this work we have been presented by the publishers. It consists of a series of lectures which were first published in the Medical Examiner, during the years 1840–1, with some additional lectures, which are now presented in a seperate and more accessible form, at the request of many of his pupils. In the year 1835, a valuable little volume was published by Dr. Gerhard, on the diagnosis of thoracic diseases, but as the treatment of those maladies was not touched upon, he in his present undertaking has very properly remedied that defect.

For several years Dr. Gerhard has been assiduously engaged in studying and teaching the diseases of the thoracic viscera, and for the attainment of full success in the one as well as the in other, few are better, or indeed so well prepared. Of industrious habits, an acute and accurate observer, a well disciplined mind, together with a full mastery of his subject, he is well qualified to excell as a teacher and as a scientific medical writer. To the possession of these, the work before us abundantly testifies.

After pointing out to the student the proper manner of studying

auscultation and percussion, a knowledge of which every physician should possess, and without which he must find himself constantly exposed to mortification, if not to disgrace, on account of the unpardonable blunders which he is obliged to commit, he dwells with earnestness on the importance of combining the physical and rational signs. This is just as necessary as an acquaintance with auscultation and percussion is, for errors of diagnosis are almost as apt to result from a neglect of the rational as of the physical signs. His remarks, impressing the importance of the former on the mind of the physician, are the more valuable, and should be the more hearkened to, because of the imposing nature of the latter and the facility with which they are apt to command the undivided confidence of the learner in medicine. While, therefore, the physical signs furnish us with greatly the most accurate means of detecting and distinguishing certain diseases, we should not close our eyes to the light which may be reflected on them from other sources.

After giving directions, which are so simple and clear that the least attentive learner can easily understand and follow them, in regard to the physical examination of the chest—after distinguishing the different ronchi—the varieties of cough, and describing the diversified appearances presented by the sputa, he speaks of the pathology and treatment of the diseases of the chest. On these topics the author discourses with great ability. His pathology is comprehensive and satisfactory, while his treatment is very judicious. To our readers, therefore, we recommend the book of Dr. G. as the fullest and most judicious manual, in relation to the diseases of the chest, which they can procure.

Practical Surgery, with one hundred and fifty engravings on wood. By Robert Liston, Surgeon. Second American from the third London edition, *with additional notes and illustrations*, by George W. Norris, one of the Surgeons of the Pennsylvania Hospital. Philadelphia: Thomas, Cowperthwait & Co. 1842. pp. 588 octavo.

We are indebted to the publishers for a copy of the above work, which we may now cognominate *popular*. This we may say, with perfect justness, not only from the estimate in which it is held by competent judges, in great Britain, but in the United States

It has already passed through three editions in the country of its nativity, in a very few years, and this is the second edition of it that has appeared in this. The author, without the least taint of exaggeration, is considered amongst the most intrepid, dexterous and successful operative surgeons now in existence. He has enjoyed a wide range of practice—has profited by his opportunities, and has established, on a firm basis, a very enviable reputation. We have the honor of his acquaintance, and can testify to his inimitable skill as an operator, and having read his '*Practical Surgery*,' we find much reason in it to regard him as an experienced and scientific surgeon. To those who desire a wide and comprehensive view of British operative surgery, as it at present exists, together with an acquaintance with the novel operations and peculiar opinions of the author, we recommend the work under consideration.

The additions of *Mr.* Norris are numerous, and many of them valuable; and the style in which the work has been published does the greatest credit to Thomas, Cowperthwait & Co.

The Western Lancet, devoted to Medical and Surgical Science, edited by Leonidas Moreau Lawson, M. D. May, 1842.

This is a new periodical, and comes to us under favorable auspices; it has our earnest wishes for its success. Its editor is a zealous and talented cultivator of science in general, and of medicine in particular.

"The Lancet is designed to be essentially *practical.* Abstract speculations and obscure theories will be seduously avoided, while true principles, leading to practical conclusions, which will exclude empiricism and establish rational deductions, will be carefully cultivated. For these purposes, we solicit from the profession contributions, and hope they will select from the vast amount of materials within their reach, such facts as will essentially aid our enterprise."

The Lancet will be published monthly, in the city of Cincinnati, each number to contain 48 octavo pages, at *three dollars* per annum, payable in advance. Notes of solvent banks, in the State in which the subscriber may reside, will be received without discount.

MONTHLY PERISCOPE.

Character of Dr. Doane.—The following sketch of the character of Dr. Doane, by the editor of the *Bost. Med. and Surg. Jour.* we copy with pleasure, and while we commend it to the attentive consideration of the physician, it would be a dereliction of duty not to express the hope that editor's of medical journals will make it their study. Should they do so they may probably imbibe some of that amiability of temper for which Dr. Doane was so remarkable, as well as a portion of that keen sense of what is due to others which rendered him so decided a favorite with his brethren, and then, perhaps, they would not, so readily, propagate the most injurious reports, and that too on the authority of the most idle and inimicable newspaper gossip, and after being informed of the error which they had committed, decline its correction.

No physician in Boston, in any period of its history, has passed through the phases of professional life, from beginning to end, with more true success than the late lamented Dr. George B. Doane, whose death was announced in the Journal last week. To a well cultivated mind, and the most exact deportment of a gentleman, he added, in an eminent degree, a kindness of manner, and a sympathy in the very expression of his face for those whose misfortunes obliged them to consult him, that made him truly the beloved physician. Dr. Doane was unobtrusive, yet vigilant and active in the sphere where he achieved a reputation for being the friend of the friendless, and an almoner of the poor. He was careful not to interfere with the rights of his medical brethren—nor was it ever said of him that he indulged a prejudice or gratified a jealous disposition, by undertaking the attainments of any one whose popularity might at some future period interfere with his own schemes of ambition. This is the sunken shoal on which many physicians are wrecked. Jealousy, subjoined to an impetuous, fault-finding temper, that never allows the unhappy possessor to discern a redeeming trait of character in an inoffensive rival, whether in science, literature or social neighborhood intercourse, is the rock on which many a practitioner is dashed in pieces; and yet, when he finds himself bereft, as he assuredly will in the sequel, of such friends as can only be procured by the conscientious exercise of the law of forbearance—by doing as one would be done by—he marvels at the ungenerous treatment of the world, and hates those who would have aided him, had they not been driven off in disgust by his own determined acts of persevering ill treatment. Dr. Doane's life will bear inspection now he is dead.—

No person speaks ill of him—for it could not be done with a single ray of truth. Those who strictly copy his uniform course, both with the sick and the well, will secure the respect of the community while they live, and the influence of a well-spent life will not die with them.

On the use of the Iodide of Potassium in Opthalmic Diseases.—The iodide of potassium promises to be of much service in opthalmic complaints, particularly those that depend upon or are connected with a scrofulous or cachectic condition of the general system. In addition to the testimony which has been already adduin behalf of it, Dr. Isaac Parish records in the *Phil. Med. Examiner*, two very severe cases of granular opthalmia which had resisted many other remedies of reputation, and alludes to others in which it appeared to be completely successful. The most striking effect which was derived from it in these cases, was its influence on the severe neuralgic pain, from which the patients had suffered long and severely. The remedy seemed to put a period to this in a very short time, and the relief was permanent, placing the patient beyond the influence of those changes of temperature which so often induce and aggravate this peculiar affection. As a consequence of this immunity from suffering, tranquil sleep was enjoyed, the appetite and strength returned, and the local inflammation rapidly subsided. The dose in which the iodide was given, was from two to five grains, three times daily, in a table spoonful of the compound syrup of sarsaparilla.

Observations on Scarlatina. By Thomas Fitzpatrick, M. D., Licentiate of the King and Queen's College of Physicians.—[Scarlatina is a disease of such frequent occurrence, that any practical hints tending to diminish in any degree its mortality, are looked to with interest. The author of these observations has certainly not been more fortunate than his predecessors in falling upon a plan of treatment which may be considered as the best adapted to the treatment of the disease. To certain conditions it is, however, applicable, and to precisely those which accompany the most fatal cases. The prophylactic treatment by mercury certainly promises as well as the belladonna; whether it is entitled to more confidence, time must show.]

"Let us take the following example: A child is attacked with fever and sore throat; scarlatina is apprehended; the child is purged on the first day; on the second the feverish symptoms are not alleviated, and the throat is probably worse, the body being covered with the eruption The child is leeched, purged again, and tartar emetic solution is then administered; the patient is first in some degree exhausted by the application of leeches; during this state the action of the purgative com-

mences; the child is carelessly taken out of bed, not to answer the call of nature, but of medicine, and is exposed during its operation to the cold air. The tartar emetic is now given, and nausea and vomiting are added to the ante-febrile agents. Still the fever is not subdued; the pulse continues rapid, but weak; the eruption begins to disappear, the child, from being restless, becomes remarkably quiet, and a train of formidable symptoms follows. Having witnessed such results, I have adopted a different mode of practice; I place the patient, if possible, in a large and airy room, directing, after the appearance of the eruption, that the surface of the body should be carefully at all times covered by the bedclothes, regulating their quantity by the temperature of the atmosphere but taking care that an equal temperature is always maintained, moderating the heat and uneasiness in the skin by frequent tepid sponging, and administering aperients only sufficient to keep up the regular action of the bowels; by this mode of proceeding (being of course prepared to meet inflammation which might arise) I feel assured, that severe forms of the disease terminated favorably, which, under a more decidedly antiphlogistic treatment, would have assumed dangerous appearances. Let me not be understood as advocating the old heating and stimulant plan of treatment, nor deprecating depletion, when circumstarces demand it; but such circumstances generally prove the exception, not the rule. In proof of this assertion, I may observe, that Dr. Williams, in his work on Morbid Poisons, mentions that in 241 cases, treated at the London Foundling and Fever Hospitals by bleeding and active depletion, the deaths were one in six, while in 555 cases treated by aperients and mineral acids, the deaths were one in twenty-two. We have, however, unfortunately, too well established evidence, that in some cases of this malady all modes of treatment are unavailing; too many instances have occurred of whole families being carried off, notwithstanding the unceasing efforts of the most experienced practitioners. It is to such cases occurring in families that I wish to direct the attention of the society." * * * * * * *

"I was not aware of any remedy having been suggested under such circumstances, with the exception of belladona, and in this I had no confidence, particularly as I considered it highly probable, that from the necessary exposure to contagion, the children were at the time, under the influence of the miasma. The extraordinary effect of rapid mercurial action, in modifying the character of the disease, as exhibited in the case of the lady already alluded to, influenced me in concluding, that the exhibition of mercury in daily alterative doses, prior to the establishment of the febrile stage, would place the children in the most favorable position for the production of the full effect of this remedy, *at a very early period of the disease*, should the character of the inflammatory symptoms require such a proceeding. From the high repute which the mineral acids possess in the treatment of scarlatina, I also determined on giving muriatic acid, having besides, in view its tonic effect. I considered, that by cautious observation of the effects of the mercury, and by taking care that it was not given to such an extent as to produce its usual marked effects on the system, no possible injury could accrue to the child if he escaped scarlatina; while if it became developed he would

not be in a more unfavorable state for the resistance of its influence.—On the contrary, it might reasonably be supposed, that even if the effect of the remedies was merely the promotion of the natural functions of the alimentary canal, such a result would be more beneficial than otherwise; but another important consequence might follow, namely, the production of an altered condition of the individual's constitution, which would modify the character of the disease, it being remarkable, that the most apparently strong natural constitution, so far from offering due resistance to scarlatina, serves rather as an indication of its probable severity. My observation leads to the conclusion, that children of a delicate and even scrofulous constitution, frequently present the disease in a milder form, and certainly the most extraordinary recoveries from the greatest danger that I witnessed, occurred in individuals of this class. Influenced by these considerations, I visited the children on the following day, (June 19th.) and ordered a mixture containing dilute muriatic acid, mucil of gum arabic and water, the dose being so regulated, that the eldest child took five drops of the acid three times a day, and the younger one a proportionate dose. I also directed three grains of blue pill for the boy, and half that quantity for his sister to be taken at bed-hour, and advised that they should be allowed to take their usual exercise, and that their diet should be light and nutritious."

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"The younger child was attacked on the morning of the 23d; the symptoms bore a resemblance to those of her brother, but in a milder degree; the treatment was consequently less energetic, leeches not being required. In neither case was it necessary to continue the calomel after the first twenty-four hours, nor was there any evidence of its having effected the system. In the consideration of the result of treatment in the foregoing cases, it may be questioned, whether they might not have proved as favourable without any preparatory treatment, it being occasionally observed that variations in the character of the disease occur in its progress through families. While we are ignorant of the cause of such variations, it is quite idle to attempt the solution of this question. Although it is admitted that they are occasionally observed, yet medical authorities of great eminence are opposed to their general probability. Dr. Willan states, 'that when scarlatina spread widely, it exhibited, in the different persons, every variety and gradation of appearance, from the slightest to the most malignant form of the disease, yet, during its diffusion through some large families and schools, he had seen it uniformly retain the series of symptoms which occurred in the first patient with nearly the same degree of fever." * * * *

"I do not advocate the doctrine that mercury is a specific in scarlatina, for the simple reason, that I have witnessed cases in which ptyalism was established, eventually proving fatal, but it was at an advanced period of the disease, when the patients became mercurialized, and even then, a temporary improvement was produced, followed, however, by an aggravated fatal termination. I have before remarked, that one object I had in view in administering mercury in alternative doses previous to the febrile stage, was to place the patient in that position whereby, if the

character of the inflammation demanded it, I could with greater probability produce a rapid mercurial effect, with the hope of *arresting the inflammatory action in its progress*, an object which, under ordinary circumstances, can scarcely be produced, if the febrile stage has existed for any lengthened period, because this state of the system bears an analogy to bad typhoid fever, in presenting the greatest difficulty of bringing the constitution under the influence of mercury; indeed the attempt to induce mercurial action in scarlatina after the febrile stage has been fully developed, and the local inflammation has arrived at a degree of intensity, is rather injurious than beneficial. I shall not stop here to inquire whether the first link in the chain of morbid action is connected with the great nervous centres, or the mucous membrane, but I feel satisfied, that the early arrest of inflammation in the mucous membrane is most desirable; and we have positive evidence that such an effect can be produced by creating a sudden new impression on the part, even though the irritated or inflammatory state may arise from a specific poison; this difference being applicable to scarlatina, that mere local treatment fails, unless accompanied by remedies which produce an effect on the general constitution."—*Phil. Med. Examiner from Dublin Journal for March.*

Treatment of Mesenteric Glandular Affections. By Dr. Charles Clay, Manchester.—Under the name of marasmus, and as an affection of childhood, diseased mesenteric glands are very common, almost daily coming under the notice of medical practitioners, *particularly in manufacturing districts*, where laxity of fibre and much constitutional debility prevail, and where the habit, diet, &c. contribute considerably to its encouragement. But as a disease of puberty or adult growth, comparatively little is known; yet it is certain that a disease strictly analogous to the marasmus of childhood is very prevalent, much more so, indeed, than is generally admitted, and annually carries off many whose deaths are often attributed to very different causes, even in other than manufacturing districts. Three-fourths of the common cases of atrophy are attributable to glandular obstruction only. From the many cases that I have observed during twenty years' practice, and in the treatment of which I have been engaged, a few practical observations with respect to it may not be unacceptable particularly as there are few cases that call forth more patience from the medical attendant, and certainly none that are productive of greater disappointment, rendering it in the highest degree necessary to make a correct diagnosis, which having been made, a long and steady perseverance in remedial measures is to be pursued. I say a long and steady perseverance, because the nature of the case particularly requires it, not only on the part of the medical attendant, but also of the patient. In all cases of long continued disease there is an aptness to run from one practitioner to another, vainly seeking that immediate relief which cannot possibly be given. If a correct diagnosis be once formed, and the slighest benefit obtained, every confidence should be placed in the party, and perseverance should be the motto of the invalid.

The treatment of mesenteric affections is so often confounded with that of atrophy from other causes, that great errors have arisen, which it is the more necessary to point out. No gland can be enlarged or indurated by disease without obstructing the operations of nature, for which those glands were especially formed; it is evident, therefore, when such indurations are ascertained to have taken place, our attempts at relief should be directed to the chief cause of mischief. Where glandular obstructions exist, it is evident that the quantity of chyle must be limited in proportion to the extent of diseased structure, and in the same proportion the system suffers from emaciation, not receiving the supply of nutriment sufficient to maintain the system in its former healthy state; consequently, this disease is found in every stage, from the slightest obstruction to the entire obliteration of the glandular action; no chyle poured into the blood, the system is emaciated in the extreme; the limbs or parts most distant from the centre of circulation become œdematous, and death immediately follows.

If, then, glandular obstruction be the diagnosis, what is to be done? This leads me to make a remark or two on some of the general axioms of treatment pursued in such cases, with a view to point out their errors, and substitute a plan that the writer has often pursued with considerable advantage.

Dr. Thomas observes, "That in all cases of atrophy the patient should make use of food that is nutritive and easy of digestion, and it should be taken *frequently*, but in small quantities at a time." I fully agree with him as to the kind of food, but maintain that to feed an atrophic patient *frequently* is a very mischievous doctrine, calculated to increase rather than lessen the evil: that the whole of the alimentary canal is much deranged in atrophic cases is certain, and the greatest caution is required in the selection of such food as will not require too great an effort for the digestive function; but for that organ to be continually stimulated by constantly taking food is decidedly injurious, the stomach requiring rest from its usual operations as much as any other organ in the body. The repose of the digestive function is necessary to the well-being of an invalid, and in none more so than in atrophic cases, when it is evident, however much chyme may be formed, no more chyle can pass into the system (in consequence of the indurated glands), if the patient be eating every hour in the day, or if only allowed to indulge three times in twenty-four hours; there can be then no advantage in debilitating digestion by frequent meals, whilst the disadvantages must be apparent to every one on the slightest reflection, viz., it increases general debility, and prevents the due operation of medicine calculated to resolve the existing indurations, and consequent obstruction in the mesenteric glands. Impaired digestive function is the consequence, *and not the cause*, of the prevailing disease in this case. The real disease should be primarily attacked with the necessary caution of not impairing the powers of digestion further; it will then be evident that all those symptoms necessarily arising from such causes must give way as the cause which provoked them vanishes. The too frequent exhibition of, and too much dependence on powerful tonics, appears to me contrary to the diagnosis of mesenteric glandular affections, for it must be

useless to waste time in the endeavor to improve the function of the stomach by tonic medicines, which, though considerably impaired, *is capable of digesting more food* than can be converted into chyle. The symptoms of indigestion we so often find as attendants of glandular obstruction, are often increased to a very considerable degree by the ill advised and constant taking-food system.

Very many cases of this description are treated in respect to the miseries of indigestion, whilst the glandular affection is either totally lost sight of, or treated merely as as a secondary matter of minor importance, whereas the very reverse ought to be pursued. The constant stimulus kept up by tonics, in an emaciated system (extremely sensitive and easily excited), counteracts every effort at reducing glandular induration; and this is rendered still more injurious by wines and other stimulating drinks which have been recommended. Such a mode of treatment might be adopted in the common forms of scrofula with less objection than in mesenteric affections, but I must confess *even in those* I never perceived stimulants attended with any good effect. In atrophic cases, however, they are highly pernicious, although they are esteemed by some as scrofulous affections. When œdema takes place, diuretics have been advised; but as this feature is one pointing out the inevitably fatal termination of the case, such means can only hasten the event, being only another drain on the already debilitated system, without adding anything to the supply. Should any means adopted prove successful in restoring the glands to a healthy action, by resolving the existing induration and restoring them to their original size, then there can be no mistake in the exhibition of tonics, freelyadopting every means for restoring the physical powers of the system.

The treatment which I have found most effectual, and which I do not advance on mere theory, but from twenty years' close observation, is the use of a medicine that is generally allowed to be almost a specific in diseases of the glandular system, and that in doses so small as not to excite the disturbances of the digestive organs, combining such means with milder tonics just sufficient to keep the system from sinking any lower, without any anxiety for increasing the physical powers, until the indurated glands may have been restored; under such circumstances I commence by giving the following:—R. Tincture of iodine, gtts. xxx.; Fowler's solution of arsenic, gtts.; xxv.; infusion of colombo or gentian, scruples vi. M. Let one sixth be taken three times a day.

As it sometimes happens that the solution of arsenic produces pains in the head, I occasionally omit it in the mixture for the space of two or three days, after which it is resumed. By persevering some time steadily with this mixture, I have found the worst cases much ameliorated, and life considerably lengthened, whilst many have been entirely restored to health; but as glandular resolution is of itself an extremely slow process, so it requires both perseverance and confidence on the part of the invalid, and great patience from the medical attendant. It is also necessary in the progress of cure to effect the system very slightly with mercury once or twice, and in some cases of extensive disease of long standing even three times with great advantage, by which means the absorbent vessels are stimulated into freer action, and the effects of the

iodine seem to be improved by it. When it is requisite to give mercury I prefer affecting the system as rapidly as possible by very small doses of calomel very often repeated, as—R. Calomel, grs. ij.; crumb of bread, enough to make twenty-four pills. Take one every hour until the mouth is affected.

The advantage in this is, that the desired effect is frequently produced within twenty-four hours, when the iodine mixture can be resumed (which it is neeessary to omit while the effect is being produced). This plan, if strictly attended to, is one that I can recommend with confidence as a safe and effectual one, applicable to every case of glandular induration, and unsuccessful only in cases too long neglected, where the action of the glands is almost entirely obliterated. The diet should be strictly such as to afford the greatest quantum of nourishment with the least possible exertion of the stomach, to be well masticated, mixed with as little fluid as possible (with the exception of milk), and particularly to avoid those of a highly stimulating character, such as wines, spirits, and fermented liquors: to let a space of at least six hours elapse between taking food, and even then the stomach should not be overloaded. These rules are imperative to the well being of the patient. Exercise should be of the gentlest description; why horse exercise should be so highly spoken of by many, I cannot conceive; in many instances I have seen it the very reverse of gentle; only fancy a weak, emaciated female tugging at the reins, and urging forward a stupid, rough-paced animal with an exertion highly injurious, unless the adviser would go farther and say the kind of horse he recommends, he might as well send his patient to the treadmill: unless, then, the horse is a very suitable one, I am convinced the patient would progress better without such exercise. Where it can be procured, and weather permitting, an airing in an open carriage, or a gentle walk, is to be preferred; if, on the contrary, the weather is unfit, a swing rocking horse, or exercising chair, are very good substitutes; the mind to be kept cheerful, free from extraordinary excitements, occupied rather on pleasant trifles than on subjects requiring reflection. The atrophic cases of manufacturing districts, however, have but little comfort at command; still I have seen many restored under almost every disadvantage, and am anxious the plan should have a more general application, that its merit may be fully and fairly tested.—*Boston Medical and Surgical Journal from London Lancet.*

Naval Surgeons—Their Grievances.—To cool the unreflecting ardour of our young medical friends, for situations in the navy, and not because we believe any speedy or efficient steps will be taken by the government, to remove the many sources of grievance complained of, we copy the following article from the *N. Y. Lancet:—Editor.*

There is no class of our professional brethren on whom we look with more esteem than the naval medical service of our country. Indeed, we had almost said that they had the priority in our regards. And are

not our naval surgeons worthy of our highest respect? Generally speaking, their professional attainments are of the most respectable character,—in order to test their fitness for the discharge of their important duties, they have all been subjected to a rigid examination, which constitutes a very different ordeal, indeed, from the farce, in which the alumni of our two or three score of colleges enact a part preparatory to receiving their diplomas,—the duties of their station are peculiar and arduous, requiring their most extensive and familiar acquaintance with their profession, and the possession of a more than ordinary degree of moral and physical courage,—and enjoying singular opportunities of carefully observing the effect of climate and habits upon the human constitution, and their influence on diseases, they have often made valuable contributions to medical as well as to general science. Besides these considerations there are many others, which give the members of the naval medical service peculiar claims upon the sympathies of their brethren, who

'Live at home at ease.'

The grievances of this portion of our brethren are, therefore, matter of common interest, and he must lightly esteem his own standing in society, and the honor of his profession, who hears their recital unheeded, and makes no effort to obtain their speedy and effectual redress.

We well know the nature of the greivances under which the British naval medical corps have heretofore labored, and to remove which, there has of late appeared, some faltering disposition; evincing, however, that the gross injustice and evil tendency, obvious enough, of those usages of which our brethen so long complained in vain, are beginning to be perceived by those in authority. But it has been only recently that we became aware that the circumstances of naval surgeons in the service of the United States presented, in many particulars, so unhappy a parallel to those of their brethren in the British navy. We had hoped that under the stars and stripes, the naval surgeon would have been free from the vexatious annoyances, and mortifying insults, and persevering oppressions of irresponsible despotism,—that he would, as a matter of course, occupy his proper position,—and that for the adequate reward of his labors, there would have been the most liberal and honorable provision. But the condition of American naval surgeons so far from being better, is in some respects worse than that of the British. Let us briefly review their grievances, and in doing so we gladly avail ourselves of the assistance of the talented author of an 'Exposition of the unjust and injurious relations of the U. S. Medical corps,'—an anonymous pamphlet which has been recently published in Baltimore.

This 'Exposition' is extremely temperate and dignified in its tone, and instead of the bitter complaint, which might not unreasonably have been expected from one who has himself smarted under the wrongs which he decribes, the writer uses only the courteous language of calm expostulation. The following extract describes, with great fidelity, the degradation to which the assistant-surgeon is subjected after receiving his commission:—

'But here all justice stops; he has a commission in his pocket, it is true, but none in fact; caprice and usage are more powerful than his

country's will. His commission is never known again while he is an assistant-surgeon, perhaps, for ten or twelve long years of his life. On ship-board the privileges of that commission are violated; he is at once suddenly thrust from the station to which his profession, his age, the interest of the service, and the intentions of the government, entitle him. Simple warrants given by the department. without the concurrence of the senate, take precedence of him; aye! even temporary *appointments*, made or destroyed by the breath of the ship's captain, are, in all usages of sea life, superior to the rank of his commission. Upon reporting himself on ship-board, the assistant surgeon is assigned to the narrow limits of the steerage, crowded with boys about entering upon their nautical education; full of fun and frolic, and merry with the noisy hilarity of youth. This is his home, and these are his associates. If he is admitted into the society of those more nearly his equals in years, it is as a concession to which his rank, implied from his *apartment* does not entitle him. Upon descending to his apartment, perhaps, the first salutation that he meets, is a laugh at his trunk of books. Where is he to put them? No trunks are allowed there. and the only accommodation that he has, is a 'stow-hole' for his clothes. But it would be idle to make any provision for professional studies, in a place so little suited to their prosecution. The student who has for years taught his mind to seek pleasure in the pursuit of knowledge, and strengthen it by converse with those of the highest order; regarding every day as lost in which he does not add to his own ability to be useful, finds himself compelled to recede from the station he had acquired, to return to his forgotten juvenility, and either, to repress all social feeling, or, to find its enjoyment by becoming again a boy. He is also compelled to submit to all the minute regulations established to restrain his more youthful associates. Human nature finds it easier to yield to surrounding circumstances, than continually to resist them, and the foregoing relations are sufficient to diminish the tone of thought and feeling of any mind. But the medical officer is expected to make bricks out of straw. Notwithstanding the adverse circumstances in which he is placed, and that such usages debar him of the means of improvement, he is expected, daily, to increase in knowledge, and at the end of five years, is submitted to another rigid examination to test his progress, and should he be again successful, is rewarded by a very slight increase of pay; but his station is in no wise changed. His apartment and his associations are still the same, save, that a new and more juvenile set may take the place of many of his former companions, who have now grown past him, and are occupying seperate apartments in the ward-room, with all the concomitant honors of ward-room officers; some of them, as has been the case, may be acting commanders, while yet he is the humble steerage officer. The assistant-surgeon, after years of service, passes out of or into the ship in silence and unhonored, *must* approach it on the larboard side, or be regarded as a tresspasser, and, to the sentry's hail, answer an humble 'no, no;' must puff his cigar on the larboard side in company with his friends the middies, some of whom are now but little older than his own children; the sacred starboard being tabooed to his humility; and he must

be careful to select the forward hatchway in decending to his apartment.'

In fact the whole life on ship-board is one continued scene of systematic insult to the feelings of the assistant medical officer. Nor does his promotion render his circumstances much better:

'It is well for his feelings that the education of humility he has passed through, has prepared him for a patient endurance of its continuance. Although the chief object of our remarks is not in reference to pay, still the great injustice with which the medical officer is treated, as regards compensation, requires a passing notice. Now that he is promoted to a full surgeoncy, his pay is less than that of the youngest lieutenant in service, and there are surgeons, who have for years occupied the highest rank of their corps, receiving less compensation than lieutenants, who, long after the admission of these surgeons, entered the service as youths, (of course, received their education in it,) and are now not older in years than the medical officers were at their original admission. It would seem that to name such injustice would be to secure its correction. The surgeon has now become a ward-room officer, and, excepting a trifling increase in his pay of two hundred dollars, for every five years of service, his position is stationary; and stationary, at the most humble point; the respect he receives is dependent entirely upon the character or the whim of his associates: none is guaranteed him by regulation, and he is generally compelled to yield precedence in all points of etiquette to the youngest of his associates, and even has his seat at the mess table assigned him upon this estimate of his rank. Gradually, and by the lapse of time, his brethren the 'sea-officers' pass from the ward room to the rank and honors of commanders, and to the occupation of their own cabins, but the old surgeon, though gray hairs and an enfeebled body mark the length and fidelity of his service, finds no increase of comfort, the same position and the same limited apartment which he entered on the first day of his promotion, are all that he can claim, on the last day of his service, and he passes to his grave unhonored, save by the spontaneous award of those who knew him.'

But the humiliating position assigned to the naval medical officers, is not the only injustice of which they have to complain—their pay is far inferior to that of their brethren in the army, and is altogether an inadequate remuneration for their services. Assistant-surgeons in the army receive more pay than a surgeon of ten years' standing in the navy, although the naval surgeon may have been for twenty years a commissioned officer. The following table shows the relative compensation of the officers of both services:—

	Army.	*Navy.*
Surgeons of ten years standing, ...	$2519 83 to $2884 83	$1400 to $2172
Surgeons under ten years. . .	1794 00 to 2227 83	1000 to 1572
Assistant-Surgeons, ...	1083 00 to 2439 37	650 to 1272

Now this disposition in the rate of compensation is utterly and manifestly indefensible. If any disproportion should exist, undoubtedly it

ought to be, in our opinion, in favor of the naval service, the privations and dangers of which are certainly the most formidable.

The injurious influence which these grievances must necessarily exert upon the character of the naval medical corps itself, and their tendency to mar its efficiency, are so obvious as to require no exposition. Men of talent and respectable attainments have few inducements to enter a service, 'which neither rewards their labors, nor respects their profession.' Now these things ought not so to be. A regard for common justice, and the national honor, require from the hands of the government, the prompt and complete redress of these weighty grievances. Let the naval and medical officers be placed in all respects on an equal footing with those of the army—let them occupy that standing to which they are properly entitled as gentlemen and possessors of an honorable commission—let their pay be made somewhat commensurate with the value of their services—and let their dignity and rights be as fully sustained as those of their brother officers. There would be surely nothing unreasonable in thus assigning to an important class of public servants, their appropriate position, and making adequate provision for their comfort and respectability. We agree with the author of the pamphlet before us, that the present is a favorable period for seeking these so-much-called-for changes. The head of the Navy Department seems disposed to effect every needful reform, and to advance as far as possible the interests of his important charge. We trust that his attention will not be called in vain, to matters so closely connected, as these under consideration are, with the well being of a service which has in all its departments such acknowledged claims on the peculiar attention of the government and the nation.

In our next number we intend returning to this subject, and will make an *expose* of the ridiculous and unjust system adopted by the Naval Board of Examiners, at present in session at Philadelphia.

Spontaneous Combustion of the Human Body.—The following conclusions are drawn by M. Jacobs from the reports of twenty-eight cases related by different authors.

1. Spontaneous combustion occurs only in human beings, and never in the lower animals; and among the former only in the living and never in the dead body.

2. The majority of cases occurred in persons advanced in years; the youngest was twenty-nine years old, and there were other two fifty years old; all the rest were above the latter age.

3. By far the greatest number of victims were women: of the twenty eight cases, two only occurred in men.

4. In one case the catastrophe was preceded by a state of jaundice; and in another by the existence of an unhealthy ulcer on the head.

5. All the persons were alone at the time of the accident.

6. They had all led an inactive life.

7. They were all very fat and corpulent; with the exception of three of the women, who were thin, and of a dry habit.

8. The majority, but not all, had been addicted to drinking spirituous liquors.

9. In most of the cases, there had been a candle or fire, or some burning body close to the spot where the accident occurred.

10. Spontaneous combustion usually proceeds with great rapidity, as in from one to six or seven hours.

11. The flame proceeding from the body was not readily extinguished with water; it was very lambent and moveable, and destroyed only such articles as were quite close to, or in immediate contact with the burning body.

12. The room, in which the combustion had taken place, was in most of the instances filled with a dense smoke, and the walls were covered with a carbonaceous substance; the floor, the bones, and the ashes were coated with an unctuous and highly-fetid matter.

13. The trunk of the body was generally quite destroyed; the remains being only some parts of the head and of the extremities.

14. All the cases of this singular occurrence, with the exception of two, have taken place when the weather was cold, and usually during winter, and in northern regions.—*Medical and Surgical Journal from Casper's Wochenschrift.*

Polypi of the Rectum in Children.—Professor Stolz has published in the Gazette Medicale of Strasbourg, a pamplet on polypi of the rectum in children. This disease, he says, occurs from time to time, and has almost never been taken notice of by any of those authors who have written on diseases of children, having been taken for a prolapsus of the gut. The case which first occurred to him was in a boy five years old, and presented the following symptoms:—For eighteen months he had had frequent desire to go to stool; and for a year, at each time that he went, he passed a red and bloody tumor, which in about five or ten minutes returned of itself. His parents and several medical men who were consulted, believed that he laboured under prolapsus of the rectum. Professor Stolz at first was of the same opinion, and various injections were accordingly ordered. After several weeks, upon examining him minutely, he discovered that it was not a prolapsus, but a tumor of the size of a small nut, and covered with a bloody mucus, which was protruded. It was attached not very high up the gut, by a pedicle of about the thickness of two millimetres to the mucous membrane of the rectum. A ligature of silk was accordingly put round it and tied. In three days it came away; no bad symptoms followed, and the child who had been in bad health previously, from loss of blood, soon recovered his strength. Two other cases have occurred to the professor since, and he has heard from his colleagues of several more. In one of the cases which he had, he removed the tumor by means of scissors. No blood followed at the time; but in about two hours after there was a copious hemorrhage, which put the patient's life in danger. The bleeding was arrested [by compresses dipped] in cold water, and by cold injections. The child made a good recovery, and soon regained his strength.

This last case is another example of the danger of making an incission in the rectum, or even in its neighborhood, without carefully plugging the wound afterwards.—*Phil. Med. Examiner from Edinburgh Monthly Jour.*

Nitrate of Silver and Ipecacuanha in Diarrhœa and Dysentery.—Prof. Trousseau, of the Necker Hospital, has employed this combination in both the acute and chronic forms of these two diseases, and with great success. In a late number of the *Journal des Connaissances Medico Chirurgicals* we find a report of several of the cases. In cases of dysentery an emetic of ipecacuanha was first given, and then an enema containing 25 centigrammes (5 *grains*) of nitrate of silver in 20 ounces of water. The dysentery was often checked by a single enema, but the treatment was generally continued for four or five days. It was equally useful, according to Prof. Trousseau, whether the disease occupied the colon or the ileum, only in the latter case, instead of enemata the medicine was given in pill—the dose 2½ centigrammes (½ *grain*) to an adult. To a child with chronic diarrhœa, 1-5 grain was given by the mouth, or a grain in enema.—*N. Y. Med. Gaz.*

Stewart on the Diseases of Children.—We have not had the pleasure of a perusal of the work of Dr. Stewart, but suppose it must be a good book as the *Medico-Chirurgical Review*, has pronounced it, 'the most complete and erudite treatise on the subject in the English language,' but seeing the readiness with which the above opinion has been repeated and impliedly endorsed by several journalists in the United States, we were about penning a severe diatribe against the patient servility with which they too generally submit to British dictation, when we received the *N. Y. Lancet*, and read the remarks of Candidus on the subject, to the whole of which we subscribe with the exception of the unhandsome and uncalled for epithet applied to the *N. Y. Gazette*. We shall never have a national literature of any kind, until American critics have taste and judgment to decide upon the merits of a work, as well as candor and independence enough to pronounce that decision, without reference to what John Bull may think on the subject. There are medical men in the United States, whose good opinion would make us fully as proud as that of Dr. Johnson or of Dr. Forbes. Let us think and act for ourselves independently of foreign modes of thinking and acting. Let us deserve and not fawn and flatter for foreign favor:

To the Editor of the Lancet.

Mr. Editor:—

I perceive that the learned Editors of that starveling publication —the New York Medical Gazette—'congratulate' Dr. Stewart on the favorable notice which his able work has received in the Medico-Chirurgical Review, and express the hope that their fellow countrymen will *now* no longer hesitate to purchase it! They have perhaps forgotten that

in their No. of September 15, 1841, they characterized it as a work containing 'much to invite criticism, and even to deserve censure,'—that in their No. of November 24, 1841, speaking of works on the Diseases of Children, they remarked, 'we would particularize, *as holding the highest place in our opinion*, the treatise of Maunsell and Evanson; this is truly a capital book, *up to the times in pathology and diagnosis*, (*!!*) and besides full of good practical matter.' I shall not stop to point out the correctness of this opinion as to a work which is notoriously deficient in Pathology and Semeiology, but merely quote it to show the *quo animo*, which actuates the conductors of this journal, towards all who do not belong to their particular *clique*. To crown the injustice displayed towards our distinguished and accomplished fellow-townsman, in another No. of their Journal, and to sink the reputation of Dr. S. still lower in the opinion of the profession, they quoted half a sentence from a paragraph on the second page of the Preface, as follows:—'Anatomical investigations are of little use in ascertaining the nature of disease producing these alterations.' The whole sentence reads thus:—'Disorganization of structure is the evidence of the loss of vitality in the affected part; it is the consequence not the essence of the disease; we should not therefore, regard this condition as, *in every instance*, giving all the information we need, and as our sole guide in the treatment, but only as a mark of what has pre-existed, and which we are to consider as the disease. Anatomical investigations are of great value in detecting the changes which occur from diseased actions in the various tissues—to determine the nature of their alterations and their relations to the symptoms, but are of little use in ascertaining the nature of disease producing these alterations.'

This attempt to *misrepresent* the opinions of Dr. Stewart on this important point, has not yet been apologized or atoned for, but it is hoped that the returning sense of justice, of which symptoms appear in their last number, may yet induce the Editors to retract a charge, unsustained and unsustainable except by misquotation. As they have now endorsed the opinion of Dr. James Johnson that the work of Dr. Stewart's 'is the most complete and erudite treatise on the subject in the language,' I suppose we are to understand that they no longer give the preference to 'Evanson and Maunsell,' but retract their former opinion. Is is not a shame, Mr. Editor, that native Americans should not be willing to do their own countrymen justice, until compelled to do so, by the weightier judgment of foreigners? Doubtless, the Editors of the Gazette will be gratified to know that the work is already nearly out of print, and that a new edition, enlarged and amended, with many beautifully colored plates, will soon issue from the press.

CANDIDUS.

[We can scarcely imagine anything more contemptible than the conduct on which 'CANDIDUS' so temperately animadverts. It was evidently dictated by the petty envy and still pettier spleen, which disfigure the characters of too many members of the profession; and which, in the present instance, are rendered doubly repulsive by the shallow, self-conceited assumption which accompanies them.—ED. LANCET.]

Case of Impotence. By Sir Astley Cooper.—A gentleman, 20 years of age, consulted me on account of his having lost the power of erection. The preceding circumstances were, that in November, 1794, he had a clap; that one month after, when apparently cured of this he caught the disease a second time; this lasted for two months, and brought on phymosis, and he complained of pains in his bones. For the phymosis a poultice was applied, and for the pains in his bones mercury was given. The latter disease was removed, but the former in a great degree remained. From November, 1794, to December, 1795, he made no attempt at connection; when he did attempt it, he found that, if he were not immediately indulged, he lost the power of erection. In January, 1796, when in the act of coition, the erection would leave him. About this time he observed that his semen was not discharged in the usual quantity, or in the common manner; that instead of its flowing in jerks immediately as the act of coition was to be completed, that a sudden stop took place, which was productive of pain at the neck of the bladder; and that for several minutes afterwards the semen came away in drops. At length the symptoms became so much increased, that he was unable to have any erection, except sometimes during the night, when it was very imperfect, but produced an attempt to discharge the semen, always followed, however, by a sudden stop and considerable pain. For six weeks before I was consulted, he had no power of connection. He came to me on the 14th of March. As he at first made no mention to me of the sudden stop in discharging his semen, and as he was not sensible of any difficulty in passing his water, I took it up as a case of simple loss of powers, and ordered him cantharides. After taking this medicine for two days, he complained of discharge from the urethra, of which he now informed me he had some appearance for some time. I therefore, introduced a bougie, and upon its reaching the prostrate gland I found it stopped there, and I was unable to get it by on account of the obstruction. I therefore put a small piece of lapis infernalis into the end of the bougie, and then passed it to the part at which it stopped. By doing this on three following days I was able to pass a small bougie. After passing it, I found it brought back with it a considerable quantity of semen. During this and some following nights I found that he had erections, which continued for some time. Having passed small bougies, and the parts being softened by the caustic, I resolved to pass a catheter, in which, after some difficulty, I succeeded. The erections now became of greater strength and longer duration; and as soon as the pain which these operations had occasioned was removed, he found that his semen passed from him naturally, and that all his powers were restored. In this case their was a stricture at the united orifices of the vasa deferentia and vesiculæ seminales, so that the semen was prevented flowing, and the connection between the penis and testes, was, as it were, broken.

N. Y. Lancet.

Medical Philosophy.—I was dogmatic at twenty, an observer at thirty and an empiric at forty, and now at fifty I no longer have any system.

So said Bordeu, and he was quite right, sooner or later in science, as in life, we arrive at that wisdom which almost resembles the effect of

disenchantment. But it is not given to all to reach in practice this high point of medical philosophy.

An acute sense, much knowledge, a superior reason, and a rare talent of disentangling truth from fiction and from mere probability, are necessary to enable us to form a just appreciation of theories and principles, and of their application to practice. Whoever has not acquired these qualities is condemned, like the crowd, to follow the standard of another, and to fall into either an irrational scepticism, or an empirical routine, which is often dignified with the appellation of experience.

Medical Intelligencer from Gazette Medicale.

Spontaneous Generation.—A communication was read to the Electrical Society of London, March 15th, from Mr. Weekes, detailing "Experiments in which certain insects, known as the *Acarus Crossi*, appeared incident to the long continued operation of a voltaic current upon silicate of potass within an atmosphere over mercury." This latter method was adopted to obviate the objections brought against Mr. Crosse's experiments conducted in the open air; namely the ova might have been derived from the atmosphere. Mr. Weeke's operation (a tumbler of the solution under an air-bell in a groove of mercury) commenced on December 3d, 1840; at the end of October 1841 he detected the *first* insect; on the 25th of the following month, *five* were discovered; since then they have been repeatedly seen. The creatures seem to love darkness —they scamper off and hide themselves from the light of day. The apparatus had not been disturbed once during the experiments. For the same period another bell glass, filled with oxygen, and arranged over a similar solution, had been subjected to voltaic action. On February 27, 1842, eight or ten fine *Acari* were observed for the first time; the insects in this experiment appeared to the investigator to be decidedly larger and more vigorous than those of the other.—*Med. Int.*

Medical Memoranda.—Sagelas performed recently the operation of lithotomy on a child only 23 months of age with complete success. The branches of the instrument indicated a stone 14 lines in diameter.——Young physicians, well qualified, are patronized by the government of Egypt; and the *witty* editor of the *N. Y. Med. Gaz.* says, "to those in our good city who are literally starving, waiting for their professional fathers to die, we say go, and you will get fame and wealth in season to return and enjoy the pleasures of retirement, while they are yet delving for a subsistence."——Dr. Mott, says the Traveller, comes out in favor of tobacco, as a preventive, and perhaps a cure, of laryngcal phthisis.

This, it is said, is in accordance with the doctrine first advanced by Dr. Maurau, of Providence, R. I., three years ago, and for which he was severely assailed by the anti-tobacconists.——*Remedy for Rheumatism.*—Just before going to bed, lay a flannel over the part affected—then take a common flat iron, as hot as it can be borne and apply it in the same manner as ironing linen. Let the operation be continued some minutes, and in the morning the patient will find himself free from pain.—[*London Paper.*——*Philosophy triumphs*—Dr. Lardner is still delivering lectures on the starry heavens. At the last accounts he was at Baltimore, and was much admired. Nothing is now said about morals. The most pious and godly appear to be his best patrons—as they could not crush they now cherish him. Thus it has always been and always will be—first they persecute and then patronize philosophy.——It is said in the *Maine Farmer*, on the authority of a Mr. Mott, that St. John's Wort, will cure consumption, and in reference to this assertion it is said by the *American Farmer* 'that if it will do *that*, it is the first thing we ever heard it was good for.'——Mr. Bransby Cooper, nephew of Sir Astley, and Surgeon to Grey's Hospital, has been made a Baronet.——*Religious Insanity.*—"Were I to allege," says Dr. Burrows, one of the highest authorities on the subject of insanity, "which I thought was operating with more force than another, to increase the victims of insanity, I should pronounce that it was *the overweening zeal with which it is attempted to impress on youth the subtle distinctions of theology*, and an unrelenting devotion to a dubious doctrine. I have seen so many melancholy cases of young and excellent disposed persons, of respectable families, deranged from either ill-suited or ill-timed religious communication, that I cannot avoid impugning such conduct as an infatuation, which, as long as persevered in, will be a fruitful source of moral evil.——Dr. Buchman, of Castle Cary, Sumersetshire, Eng. recommends an ointment of half a drachm of veratria to an ounce of lard in dysmenorhœa; a portion of the size of a hazel nut, to be rubbed three or four times a day on the sacrum. 'My recommendation,' says Dr. B., 'is founded on experience.'——Deaths from small-pox in London last year, 1053.——Dr. Charles B. Gibson of Baltimore, performed an operation for osteo-sarcoma of the lower jaw, a few weeks since, on a colored man, which is greatly commended for its success.——Mr. Paul Couch, who died, at Newbu-

ryport, the 19th of last March, took to his chamber with a disease of the spine, October 1812, from which he did not in a single instance cross the threshold, till carried out dead.——A new edition of Cooper's Surgical Dictionary is preparing by Dr. Rees.——Notwithstanding Dr. Christison and others have denied the possibility of detecting alcohol in the brain, an article by Dr. Lewis, may be found in the 19th number of the *Phil. Med. Exam.* from which it appears that that question has been settled, by Dr. Pacy, in the affirmative.——An infant in a state of complete asphyxia, from some oil getting into its trachea, was recovered by a pinch of snuff, passed up the nostrils, and which produced violent sneezing.——Mrs. Ruth Irons, who died last week at Hartwich, N. Y., at the age of 55, had suffered from dropsy for nine years; but within the last two years and a half, she was relieved occasionally by paracentesis abdominis—having had a few gallons over sixty barrels of water drawn off in that time, by Dr. Thrall.——Dr. Joseph Roby has been appointed Professor of Anatomy in the University of Maryland.——Professor Dunbar has resigned his chair in the Washington University, and Dr. Baxley has been appointed to the place thus vacated.——*Death from Thomsonism.*—Dr. John Butterfield of Lowell, Mass., reports in the *Bost. Med. and Surg. Jour.*, a case of erysipelas, in the onset not severe, in which the patient was treated by a Thomsonian quack. He took capsicum, was put through a regular *course*, and finally steamed three times in twenty four hours! In a state of coma with convulsions, he was handed over to the regulars, and died after lingering a short time.——The *Port Philip Gazette*, states that a woman by the name of Ferrers, living in the district of Grange, had been delivered of six female children at a birth. Three of them continued to live; only one was still-born.——The Bavarian Schools of Medicine have been suspended by the government, and the motives assigned for so doing, is the fact that more medical men now exist than can find employment.——*A Hint to Magnetisers.*—A peripatetic magnetiser, M. Laurent, accompanied by the well-known Mademoiselle Prudence, has recently met with a very untoward check at Lille. The young lady, whose eyes were covered with pieces of court plaster and a bandage, astonished the spectators by the facility with which she played at cards and dominoes. Some medical gentlemen present, on watching Miss Prudence rather closely, discovered

that very slight motion sufficed to displace the bandage, and that the lady had annointed her eyelids previously with oil. The secret thus discovered was immediately applied in practice. A gentleman oiled his eyelids, put on the bandage, and was able to play at cards just as successfully as Miss Prudence. On this discovery being made public, M. Laurent and his pupil decamped from Lille, and have not been heard of since.——It is stated in the '*Constitutional de Bogota*,' that a dreadful epidemic has been raging there, and has carried off more than five thousand inhabitants. It is called the *viruelas*, or small pox.——Dr. W. Matthew, Professor of Chemistry and Pharmacy in the Castleton Medical College has resigned, and from the expressions of regret with which his retirement is accompanied, he must have been held, as a teacher, in very high estimation by the students of that flourishing Medical Institution.——In the printed catalogue of the members of the Prussian Medical Society, for June, 1841, is the name of Martyn Payne, M. D. of New York. This Society embraces the *elite* of the medical faculty of Russia and Germany, and till the election of Professor Payne it had not conferred the honor of a diploma on a single person in America.——For the protection of mankind from that terrible scourge, the small-pox, Jenner obtained from the parsimony of Pitt £10,000, while Sharpnell, for destroying them by his *shells*, received from Parliament a life pension of *twelve hundred pounds a year*.

Necrology.—Died at Troy N. Y., Professor Amos Eaton, the celebrated Geologist, author of sundry elementary works on different branches of Natural Philosophy, and late principal of Rensselaer Institute, aged 65. Professor Eaton adds another to the long list of American youths whose industry and perseverance have raised them to stations of eminence, unaided by the accidents of birth and fortune.

If his learning was not profound it was *useful*—if he did not make discoveries like Newton, and Laplace, and Franklin, he strewed flowers in the paths of science, and rendered its summit accessible to thousands who before were only permitted to look from its base in hopeless anxiety.—*N. Med. Gaz.*

Sir Charles Bell is dead.

THE

WESTERN AND SOUTHERN MEDICAL RECORDER.

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No. 9. LEXINGTON, KY. JULY, 1842. Vol. 1.

ESSAY ON THE NATURE AND IMPORT OF STOOLS IN DISEASE.

BY THE EDITOR.

Before we speak of the varieties that are presented, under different circumstances, by the alvine evacuations, and the causes to which they are owing, it is necessary that we should dwell, for a moment, on one or two points that should be understood in order to render unnecessary subsequent circumlocution. From what has been already intimated, in a previous article, it is evident we consider, that the elements of the biliary secretion, which consist in the refuse matter of the system, play a very important part in the production of many of the phenomena of disease, particularly of those that prevail in tropical climates, and of those of all latitudes that occur during those seasons of the year in which the action of the liver is rendered preternaturally energetic. Such considerations, however, as would make this general proposition intelligible, cannot be urged at this time, for it is a deduction from facts that are yet to be adduced, and which, in this article, would not find their proper position. Nor do we intend at this time, to enquire into the nature of the morbific principle of summer and autumnal diseases—the channel through which it enters the system—the changes which it directly and indirectly produces in the blood—how it impairs and suspends nutrition—diminishes, vitiates and suspends the biliary secretion, and thus causes the undue accumulation of effete matter in the circulation. These are all interesting,

if not important subjects of investigation, on which, perhaps, on a future occasion, we may attempt to reflect some light. It is sufficient for us to state, what will be admitted by all physicians, that there are many diseases in which there is, as a prominent, if not a characteristic feature, a morbid condition of the biliary function, the rectification of which should be a capital object with those who attempt their treatment.

If, as we have endeavored to prove, the secretion of the liver is excrementitial, it is manifest that such causes as are able to disqualify the liver for the separation from the blood of the proper amount of effete matter, must be causes of disease. This we assert, not only from what has been observed in regard to the biliary apparatus itself, but from what is known of the evil consequences that result from the diminution or suspension of the action of all other excretory organs. So indispensable indeed to the vigour and health of living bodies, is the complete ejectment of all excrementitial matters, that even vegetables suffer the greatest inconvenience, not only when they are retained, but when they are so placed as to be re-absorbed by them. Thus, by Decandolle we are told, that the proper juices, resins, and oils of vegetables are kept seperate from the nourishing fluid, and are excreted, and that if, after their excretion, they are re-absorbed, they act as poisons. We may, therefore, safely conclude that as bile is an excretion, its elements cannot be retained in undue quantity, or for an undue length of time in the blood, without being productive, to a greater or lesser extent, of embarrassment to the functions of the economy.

The biliary ducts are exceedingly small vessels that are found in the capsule of Glisson, with the capillary ramifications of the vena portæ, from which they originate. This is evinced by the readiness with which an injection thrown into the portal vein, passes into the bile ducts. We direct the attention of the reader to the vessels, to which allusion has just been made, for the purpcse of dwelling, for a moment, on their vital properties. A knowedge of these is necessary, in order fully to understand the import of many remarks which we shall have to make when we come to speak of the gradual manner in which deranged biliary function is rectified.

We have vessels in the animal economy that are called absorbents, secernents and exhalents, but it must be confessed that our

notions in regard to them are very indistinct and confused. Until recently, it was supposed that the function of absorption was performed exclusively by lymphatics, but now it is known that other vessels are endowed with the same faculty. In regard to the secernents and exhalents, all that is known is that they are very numerous—that they originate from the capillary arteries, and ramify upon membranes that are spread out and form more or less extensive exhalatory surfaces, or are folded up in the form of secretory glands, so as to present a large surface in a small compass. A little reflection will convince us that the two last orders of vessels are as much entitled to be considered absorbents in their character, as those upon which that name has been conferred. They originate, as has been said from the capillary arteries, and their office is to remove from the blood the elements of the various secretions and exhalations. How do they effect this? Evidently by no other process than that which is employed in the removal of chyme, by the lacteals, from the bowels, or the refuse matter from the structures. The supposition of any other mechanism is wholly inconceivable and impossible,—then they are absorbents. The absorbent vessels exercise the faculty of selection; they do not take up articles indiscriminately—only such are suffered to enter them, in a state of health, as are in relation with their peculiar vitality. This faculty may be properly enough denominated elective, or rather, organic affinity, and that it is also possessed by the secernents and exhalents is proved by the discrimination which they exercise, in separating from the blood such of its components as are fitted to nourish particular structures, or to form certain secretions. Whatever is exposed to the action of absorbent vessels, is more or less changed in its character, and that too through the agency of a power ascribed to them, and which has been denominated by physiologists, elaboration. That this is also a property of the secernents and exhalents no one will question, when it is known that many of the products that are formed from the blood have not been detected, and do not probably exist, in that fluid. If, therefore, the two last classes of vessels absorb, select and elaborate, it is evident that as the bile does not exist, at least, in a formal state, in portal blood, but that its elements are absorbed from it, and converted into the biliary secretion, by the biliary canals, they must also be considered to be in possession of similar vital endowments. Without

this admission, which no liberal physiologist will refuse to make, it would be quite impossible to form even the crudest notions of the processes that are going on in the organs of the body. Those physiologists who object to the language we have used being employed, do so simply on the ground that it is resorted to in explanation of actions and phenomena which we do not understand. Of the essential nature of the actions that are peculiar to organized bodies, we readily confess our ignorance; but this should not prevent us from studying its phenomena, in order, if possible, to determine some of its laws; and it is only to express what we suppose some of them to be, that the above terms are used.

Before we can engage in the interpretation of the various appearances that are exhibited under different circumstances by the alvine evacuations, we should determine, if possible, the sources from whence the contents of the bowels are derived, and the causes that are capable of modifying their character. The matters ordinarily found in the intestinal tube, consist of the aliment that has not been converted into chyme and absorbed by the lacteals, the secretions of the liver, pancreas and of the bowels themselves.

A healthy stool is of a certain consistence, it has a peculiar smell, and is, according to Abernethy and Faithhorn, of the color of rhubarb when moistened with water, or that of the yolk of an egg. It is generally conceded, that the healthy color of the contents of the bowels is owing to the presence of the biliary secretion and its intimate incorporation with them. On this point there cannot be a difference of opinion, for it is obvious that the fæces must be destitute of the color which they acquire from the presence of bile, in cases of torpor of the liver, and the shade of color which they present, must vary as there is a complete suspension or a diminution, or vitiation of the biliary secretion. Thus in jaundice when the bile from some cause does not pass into the bowels the alvine evacuations are more or less pale, or of a dull white or ash color; in lientery they are as white and as liquid as milk; in Asiatic Cholera they are of a rice-complexion; in dysentery they consist of mucus more or less intermixed with blood, and in many cases of diarrhœa they are thin and nearly as destitute of color as water. Under such circumstances improvement is never observed—on the contrary, so long as they continue we have unequivocal indica-

tions that the case is progressively becoming more and more aggravated.

The converse of this is also true. We never have pale or colorless stools, in cases where the indications of hepatic activity are decided. In those diseases in which there is a deposition of the coloring principle of bile in the skin, nails, eyes, etc., there is uniformly a torpor, or greatly impaired action of the liver, and the stools evince by their color the absence or a great diminution of the biliary secretion. The former and the latter are morbid states that proceed *pari passu*, for until there is an obvious change in the latter arising from the afflux of biliary matter into the bowels there is no diminution of the former.

There is a fæcal odor exhaled that is offensive, but which is perfectly characteristic of the alvine dejections. Various gases are formed in, and are expelled from the bowels, that make an exceedingly unpleasant impression upon the olfactory nerves, but they are very different, from the natural and healthy fæcal odor, and are proof of the existence of disease. The presence of the former is never of favorable import, although they may not be indicative of any thing decidedly inauspicious, while that of the latter never fails, in cases of functional disorder of the chylopœtic organs to proceed from an amendment of their condition. In practice, therefore, it is very important to distinguish between the former and latter.

Nor is it less necessary, in order, correctly to appreciate its value, to have clear notions in regard to the cause of the natural fæcal odor. On this point it appears to be hardly possible to entertain a doubt, so conclusive is the proof that it is owing to the presence of the biliary secretion. But it was considered in the last number of this Journal, and, therefore, it cannot be necessary to do more, at this time, than to refer to what has been already said. The ordinary color, consistence and odor of stools must, therefore, be regarded as in a great degree dependent on the biliary secretion. In relation to color and odor they may be asserted to depend exclusively on the presence of bile in the bowels. This is not so strictly the case in reference to consistence, for the stools in jaundice are often quite solid while they do not contain the least admixture of bile. This is doubtless owing in part to the simultaneous torpor of the biliary and intestinal secretions, or augmentation of intestinal absorption.—

The diminution of intestinal secretion or augmentation of intestinal absorption, are individually or jointly sufficient, even when the action of the liver is ordinarily energetic, to increase the solidity of the contents of the bowels. As the result, however, of general observation, it has been found that when there is partial or complete torpor of the liver, the alvine evacuations are preternaturally liquid, and that they manifest no tendency to become more consistent until we have decided proof that the liver is resuming its duty.

Besides an altered, diminished, or suspended biliary secretion, there are other causes which may give a preternatural character of the intestinal dejections, which it is necessary for us to understand before we shall be able, from their appearance, to deduce any certain conclusion as to the precise state of the liver, or that will be of decided service in the treatment of abdominal complaints. These consist of various alimentary and medicinal articles, which impart particular shades of color to the stools, and which, if not known and taken into account, would lead to very erroneous conclusions as to the state of the chylopœtic secretions in general, and of that of the liver in particular. To be rendered a source of useful practical instruction, the stools should be studied closely, and not hastily glanced at, as is too frequently done by those whose olfactories seem as intolerant of a "villanous smell" as an inflamed eye is of light. On no subject is the physician more liable to be deceived, and yet in regard to few subjects is it so important for him to possess accurate information. The appearances which are produced by various ingesta, are very diversified, those particularly that result from articles that are used as food, and as Dr. Bright has given the most complete summary of these with which we have met, we quote what he has said on the subject without hesitation:

Thus I have seen stools of a pitchy blackness, imitating melæna, stained by black current jelly; and motions to all appearance loaded with green bile from eating spinach, while many vegetable matters, covered with epidermis, pass quite undigested, though perhaps slightly altered—the seeds of oranges, or the still smaller seeds of goose berries, currants, and strawberries, the skins of beans, and the epidermis of dried fruits. I was once sent for in great haste by a gentleman who had just observed a curious appearance which he thought to be globules of blood floating in his dejections, but which were soon discovered to be currants he had eaten the day before in mince pie, now puffed up and distended by the warmth of the stomach and intestines, with their skins

unbroken. A sailor-boy was put under my care in the hospital, who had returned about a week before from the mediteranean, and on his voyage home had eaten figs freely. His case required purging, and very freely he was purged every day for a fortnight, at the end of which time a large number of the seeds of figs came away in a motion, though it was fully ascertained that he had eaten no figs for above three weeks.

Vegetable fibres also, as those of the stems of cabbage-leaves, have been brought to me as worms, or pieces of the intestine; but the most singular result of indigestible vegetable matter is found in the alvine concretions, which are by no means of unfrequent occurrence in Scotland and some of our northern counties, and are the cause of a peculiar disease, in producing fatal obstruction of the bowels. Dr. Marcet and Dr. Wollaston have discovered, by analysis, that these concretions are composed of concentric layers of the fine hairy down from the internal skin of the oat, on which grain the poor people in those districts chiefly subsist; and alternating with these layers are others of the earthy phosphates.

Animal substances (as the membranous parts of veal,) though more generally digested, will sometimes remain long in the stomach, or intestines, and pass after many days, but bones have remained much longer; and Dr. Locock mentioned a curious case of this kind which occurred to him,—the bones of larks having passed off many weeks after they had been swallowed, so that the fact had been forgotten, but they had in the meantime produced much painful irritation in the alimentary canal. Even the softest animal fibre will occasionally pass the intestines very little altered; of which I had an instance in a child who had long laboured under diarrhœa and almost total loss of digestion, for which cause it was found necessary to feed him on meat greatly comminuted, which therefore passed into the stomach with very little mastication. In the dejections many little red particles soon began to be perceived, which looked almost like altered blood, giving the apprehension of some ulcerative process; but these were soon found to be no other than the brown fibres of the meat, acted upon by the stomach and converted into red, as may be often seen when vomiting is induced some time after a meal of animal food. They had been hurried through the canal, and still retained their bright red color.

So completely is the character of the alvine dejections altered and disguised by some of our remedies, that it is wholly impossible, while they are continued, to learn anything from an examination of them, in relation to the state of the chylopœtic secretions. The tendency of certain medicinal agents to impart unusual shades of color to the contents of the bowels, should, therefore, be familiar to the physician, or he may commit very serious and inexcusable mistakes. When he is acquainted with the peculiar effects of such articles, he will, in the examination of the alvine evacuations, be prepared to make proper allowance for them—when they have been taken he

will, of course, discontinue their use should it be his purpose to determine how far their complexion may be dependent upon them. Thus, the protracted use of the chalk mixture or of magnesia, is apt to render them whitish, or of the color of pipe-clay, and may give rise to the suspicion that the liver is in a torpid state, when in fact it is pouring bile into the bowels in the usual quantity. Sulphate of magnesia and sulphur or any of the articles that contain it, as well as senna, will render them of a darker hue than that which is natural to them, and thus give rise to the opinion that the liver is uncommonly active, when in fact the biliary secretion may be diminished in quantity and altered in quality. The preparations of steel, as well as the acetate of lead, when it meets with sulphuretted hydrogen in the bowels, not only darkens them, but often renders them black, and may lead to the same erroneous conclusion. Rhubard reddens them, or imparts to them a hue very resemblant of that which arises from bile, and may deceive the physician into the belief that there is proper hepatic action, when in fact it is either diminished or perverted. Haematoxylum, says Dr. Bright, gives an appearance of hæmorrhage, often very alarming to the patient.

These facts, we repeat, should be kept constantly in mind when the alvine dejections are examined, in order to avoid the commission of the greatest blunders. For the correction of perfectly imaginary derangements of the chylopœtic secretions, ignorance on these points has often caused a perseverance in improper remedies to an excessive extent. When it becomes important to ascertain the exact state of the chylopœtic secretions in general, and of that of the liver in particular, the use of no purgative seems to be so entirely free from objection as that of castor oil. It produces no sensible effect on the intestinal secretions, or on that of the liver—it simply clears out the alimentary tube, and brings down its contents in the exact state they may happen to be in, at the time of its administration. Though this is the case generally, and may be, therefore, relied on for the purpose indicated, more than any other article, it is proper that the reader should know that even castor oil may deceive him, for Dr. Bright states that it 'passes in a variety of forms—sometimes in globular masses, which have been mistaken for biliary concretions.' This, however, happens so very seldom that it can scarcely

be urged as an objection to castor oil, for the purpose just recommended.

It is said that mercury brings down, habitually, morbid stools! This is true in a particular sense only. If we are to understand by it that the alvine evacuations never assume a healthy appearance so long as the preparations of mercury are continued, the charge is wholly unfounded. Mercury is the great rectifier of biliary derangement—it is known to possess more power in exciting and increasing the secretion of bile, than any other article, and consequently, when it is given, it is natural to expect a greatly increased afflux of that fluid into the bowels. Now if the color of the stools be owing, as all must admit they are, to the presence of bile, it is very certain that when it is secreted in a larger quantity, or in a more concentrated state than usual, the dejections must be made darker than common, and this is often so remarkably the case, that it renders them as black as those that are colored by sulphur or any of the preparations of steel.

Nor is it necessary for the chylopœtic organs to be in a morbid state for mercury to produce this effect. From the bowels of an individual in the most perfect health, a scruple of calomel will cause to pass one or two stools of a much darker complexion than that which is natural to them, while a second dose will have no effect, but will bring down the contents of the bowels of a natural color, and if the mineral should be persevered in, under such circumstances, they are apt to assume a preternaturally light hue, which sometimes goes on progressively increasing, until they ultimately become nearly white. Now, how are these varied appearances of the dejections under the use of calomel to be explained? If the physiology of the liver which we have endeavored to illustrate and explain, be admitted as correct, we shall encounter no serious difficulty in giving to this question a satisfactory response. It must be recollected that we have endeavored to prove that the materials of the biliary secretion, consist of the effete or refuse matter of the fluid and solids of the body. Assuming this as conceded, all will agree that when the liver is in the active discharge of its duty, the quantity of bile formed in that organ, and poured into the bowels, must be very much in proportion to the amount of the elements of bile found floating in the abdominal venous circulation, and that in a state of perfect health, they

are not more abundant than is compatible with the complete integrity of the functions of the economy.

Several medicinal articles are believed to possess the power of increasing the biliary secretion, and of these calomel is admitted to be the most certain and effectual. When, therefore, calomel or any other preparation of mercury, is given to an individual in good health, the activity of the hepatic function is increased, and the elements of bile are separated, in a given time, in greater quantity, than when the liver is under no such influence. This causes an augmented afflux of bile into the bowels, which gives rise to the dark hue which the alvine evacuations present, after a first dose of calomel has been taken. The activity imparted to the liver by the first dose, causes a rapid elimination of bile, and a consequent diminutionof the quantity of effete matter in the venous circulation of the abdomen, and when a second is given, on account of the deficiency of its elements, the amount of bile formed is much reduced and the dejections assume a natural complexion. Let the mineral, however, be persevered in, the liver thus goaded will separate the elements of bile from the portal blood more rapidly than they will be thrown into the abdominal capillary veins, by the interstitial absorbents, the consequence of which will be a gradual diminution of the quantity of bile formed, and a corresponding diminution of the rhubard-color of the stools, until at last they will become white. The production of white stools has been mentioned as one of the effects of mercury, and they have been urged as an argument against the alleged peculiar efficacy of mercury, to activate the biliary secretion. When they occur after the use of mercury, and are disconnected with jaundice, they should be regarded as resulting from an injudicious perseverance in a powerful medicine, which has caused a deficiency of the biliary principles. This explanation of white stools is given by Dr. Thomson in his recent work on the '*Diseases of the Liver and Biliary Passages*,' though he undertakes not to explain how the deficiency of the biliary principles is produced:

By the author to whom reference has just been made, it is asked: 'May *white stools* occur in cases in which there is no jaundice, and, if so, how can this phenomenon be accounted for? The only explanation which it seems possible to give of the occurrence is, that the blood is deficient in the appropriate elements of the biliary prin-

ciples, and that any fluid which the liver secretes, is consequently, deficient in these principles; for, if the want of the due constitution of the bile depended, not on deficiency of proper materials in the blood, but simply on the liver being capable of separating them from that fluid, jaundice must arise from their retention, as in the class of cases already referred to.*

If there is any plausibility in the explanation above given, it is altogether probable that the varied appearances exhibited by the alvine dejections, and which have given rise to the assertion that mercury 'habitually brings down morbid stools,' results not necessarily from any morbid modification in the biliary secretion, but from the quantity of that fluid poured into the bowels—that although appearances seem to justify the allegation, there is evidently a period, during the administration of mercury, when the amount of bile discharged into the bowels is neither excessive nor defective, and when, as a natural consequence, the fœcal contents of the bowels present their natural character. This is, as we shall, hereafter, endeavor to show, the circumstance which indicates that mercury has been pushed far enough, and that to persevere in it longer is to run the risk of converting its sanative into its morbific action. When therefore, it is said, that mercury 'brings down morbid stools,' we are to understand that it causes the flow of an abundant and a concentrated bile into the bowels, or that from misapprehending its mode of action, or the object to be attained by its administration, it has been enforced longer than is necessary or proper.

Not only is it conceded by practical writers in general, that mercury is the most certain and prompt remediate agent that can be

*We deem it proper to state, that we are in no way indebted to Dr. Thomson or any other individual, for the explanation we have given of *white stools*, while we confess ourself flattered that so respectable a writer should entertain similar sentiments, and that too without any intercommunion of opinion. In confirmation of this statement we appeal to all those who have heard us lecture, for the last seven years, in the Medical College of Ohio, and in Transylvania University, and indeed we might with perfect propriety, date our claim at a period much anterior to the time when we became a public teacher, for the same explanation was frequently advocated in the Lexington Medical Society, during the years 1829, '30, '31, and it would have appeared in the Transylvania Journal of Medicine, during the year 1830, had it not been for circumstances over which we had no control, but which it is unnecessary to advert to more particularly at this time.

employed in cases of perverted or suspended biliary secrertion, but there are those who maintain that it is more effectual, than any other article, in counteracting and preventing the evil effects that often result from excessive hepatic action. In illustration of the truth of this remark, we make the following quotation. Speaking of calomel, Dr. Ayre says:—'The power which this medicine possesses over the secretory functions of the liver, is not confined, as it is generally thought, to increasing its activity when in a sluggish state; for it is equally efficient to reduce the secretory action when in excess, its tendency, when acting, being to restore the action of the liver, whether deficient or excessive, to their natural and healthy state. In those cases where there is an impeded secretion of bile, this medicine has the power of restoring it, occasioning in many cases, at first, a very copious discharge; and where the secretion is in excess, as in the second stage of cholera morbus, its powers in subduing inordinate action of the liver are equally distinguished; and where again, the secretion is in a proper state, it appears to have but an inconsiderable effect upon the liver, though given in those doses, in which it was before so active.'

More than once have we already alluded to the close connection that subsists between the liver and skin, which, by Dr. Johnson, is denominated cutaneo-hepatic sympathy; and by which is understood a mutual dependence of function between those organs, which causes the particular state of one of them to produce a similar state of the other—that when there is an open state of the skin, there is at the same time an unobstructed state of the liver—that when the former pours out perspiration freely, the latter discharges bile into the bowels abundantly, and vice versa. Now, to whatever principle recourse be had to explain this correspondence of action, no doubt can be felt by any physician who has practised in warm latitudes, as to its actual existence. External heat is one of the principal causes of undue or excessive excitement of the skin, and it must, therefore, indirectly give rise to a copious afflux of bile. The quantity of bile admixed with the alvine dejections, being thus increased, a darker color than natural will be imparted to them, and they frequently become more acrid than usual, causing more or less heat, and sometimes pain during their dejection. In accordance with a principle of easy and familiar application, which is, that organs that have been exerted for a length of time

become fatigued—perform their functions languidly and feebly, and are apt, ultimately, to fall into a state of torpor. In hot climates the skin is peculiarly exposed to this accident, and when it happens, the biliary overflux which accompanied free diaphoresis, not only ceases, but the action of the liver is completely suspended, and then acute chylopœtic disease immediately ensues. This result is of much more frequent occurrence in southern latitudes than it otherwise would be, were it not that the influence of external heat is too commonly associated with the abundant use of distilled and fermented liquors, which greatly increase the effects of a high temperature, and consequently the functions of the skin, already enfeebled by over exertion, is more easily checked by a humid atmosphere, to which the inhabitants imprudently and without reflection expose themselves.

Now, whenever there occurs, in those regions in which acute abdominal diseases prevail to much extent, a biliary overflux, as indicated by the alvine evacuations, the danger to be apprehended is from an entirely opposite state of the biliary organ—a torpid condition of the liver, and this very common result it should be the aim of the physician to prevent. This is undoubtedly the indication which is to be fulfilled. How is it to be accomplished? Evidently by such means as will achieve the two-fold end of sustaining the liver in the performance of excessive duty, and of restoring the biliary secernents to their natural action. If mercury will increase the biliary secretion, it will of course sustain the action of the liver, and if the dejections become healthy in appearance under its use, it is of course by restoring the biliary secernents to their natural action. That it excites the liver is admitted by all, and that the stools assume a natural appearance under its use, we have already proved; therefore mercury is the article on which we should rely, to diminish an overflux of bile. The judicious and timely interposition of an occasional dose of calomel or pillulæ hydrag. will soon bring the stools to a natural color, and then all solicitude on the subject, will cease to be experienced. Quietude, confinement within doors, and some gentle tonic, such as a decoction of Columbo, will restore the previously over-excited organs, to a normal condition. It is of the utmost importance, that the mineral should be persevered in, until the alvine dejections become of a proper color, for a too precipitate discontinuance of it in ca-

ses where excessive action of the liver has been induced, may prove very prejudicial. During the prevalence of Cholera in 1833, we treated a very obstinate case, and from a neglect of this precaution, it proved fatal. The liver was torpid and several very large doses of calomel were given before any favorable alteration was observed in the rice-colored discharges. Ultimately, however, the biliary secretion was not only restored, but it was poured out in very great abundance, so much so indeed, that we did not hesitate to pronounce the woman out of danger. Thinking, as most physicians did, that after bile made its appearance in the stools, no danger need be apprehended, we dismissed all uneasiness from our mind, so far as not to think it necessary to direct a continuance of the mineral. A dark and almost black bile continued to pass for nearly twenty-four hours, when the liver again became torpid, as was evinced by copious rice-colored stools, and she died in a few hours. This result might easily have been averted by sustaining the liver in the discharge of extraordinary duty—but in the midst of the multitudinous engagements which pressed upon the attention of every physician, at that time, it was neglected, and the liver from over exertion, fell into a torpid state, and death resulted.

Not from the joint influence of a higher temperature and the indiscreet use of stimuli, exclusively, but from the agency of another cause, is an overflux of bile produced in hot latitudes. Frequently the Southern physician observes a very great increase of bile in the alvine evacuations, for several days before the actual developement of disease, and this too in those whose skins have not been excessively stimulated by heat, or systems at large over-excited by the use of spirits. This is more particularly seen in those districts that are decidedly malarious, and we have thought it might be satisfactorily explained in the following manner. It is well known that the system is often for days and weeks, and we might say for months under the influence of the febrific principle, before the actual developement of disease. During this time the impression made, although not adequate to the production of any of the summer or autumnal complaints, is sufficient to alter the blood, enfeeble the functions of then ervous system, and to impair if not suspend nutrition. The volume of the circulation is reduced on account of the diminished supply of the nourishing fluid, and the losses which it experiences on account of fur-

nishing the excretions, and this causes interstitial absorption to be invigorated. The elements of bile are in this way accumulated in the circulation in general, and that of the portal circle in particular, and if they were not rapidly eliminated, they would soon increase to such a quantity as to cause disease. Nature makes an effort to prevent this by increasing the activity of the biliary organ, and we have consequently, an overflux of bile. Such a condition of things cannot with safety be left to itself—torpor of the liver is to be apprehended, and the precautions above suggested, should be resorted to to prevent its occurrence.

That we may derive advantage from consulting the stools, Dr. Johnson informs us that they should be examined, when medicine has been taken, and when no medicine has been taken.' Than this no more prudent advice can be given, and when it is followed in practice, it will be found of great utility. But let it not be forgotten that the extent of its usefulness will depend upon the accuracy of our knowledge of the nature and import of stools. The inattentive or the ignorant may easily be led into error. This is particularly apt to be the case when the dejections are passed by the unaided peristaltic efforts of the bowels. We have frequently seen both patient and physician deceived. When asked as to the condition of the biliary secretion, the latter as well as the former, has responded 'healthy and sufficiently abundant,' and an appeal, in proof of it, is always made to the dark and liquid evacuations that are passed. Such stools, however, no observing or sound thinking physician would regard as indicative of satisfactory biliary action, for the cases in which they occur, give no evidence of improvement, until they assume a different character, which they generally do after the judicious employment of mercury. Then they become besides being dark in hue, more consistent and offensive. That such dejections should be a source of error to the generality of physicians, and to those particularly who have suffered their minds to be poisoned with prejudices against calomel, is not at all surprising.

From what has been said, it appears manifest, that we should be able to determine the quantity and quality of the biliary secretion that is admixed with the alvine dejections. On this subject Mr. Abernethy remarks, 'that any kind of brown, which dilution will not convert into yellow, I should consider as unhealthy, since the color of healthy bile is a bright yellow, which by concentration

appears brown. The brown and black color of stools is doubtless very often owing to the bile in them being in a very concentrated state, and in such cases dilution will render them yellow, but every bright yellow dicharge from the bowels, is not to be regarded as proof of the presence of healthy bile, or as an indication that the liver is performing its office properly. In the fevers of the Southern States, it is very common to witness after they have continued several days, and the symptoms have become more or less typhoid in character, a bright yellow liquid stool, which, so far from being a cause or concomitant of improvement, always results from great hepatic derangement, and is held as a certain indication of an obstinate and dangerous state of the system. Thus mere color cannot be relied upon as a certain means of determining the quantity and quality of the biliary secretion.

Dr. Dick remarks in his work on '*Derangement of the Organs of Digestion*,' after quoting Dr. Abercrombie, who says that 'the bile when mixed with the usual contents of the intestinal canal, imparts to them a bright yellow. It will give, doubtless, a corresponding tinge to the fæces; and the usual depth of this tinge, in healthy evacuations, being determined by an infinity of observations, it follows, that if a *very* deep yellow, or almost a dark brown hue, be presented in the fæces, not to be accounted for by anything remarkable in the recent ingesta dietetic or medicinal: if, in addition to this color of the evacuation, we find a more active peristaltic movement of the intestines, (another common evidence of abundant bile, as torpor of the intestines is a common one of its deficiency,) causing diarrhœa, we have sufficient probability on which to ground scientific treatment, that the liver is secreting with more than usual profuseness.' From this it appears that Dr. Dick, like other writers, considers a bright yellow stool as indicative of healthy biliary secretion; that when darker than usual, especially if associated with 'a more active peristaltic movement of the intestines' as indicative of the presence of an unusual quantity of bile.

We have already shown that although healthy evacuations are of a bright yellow complexion, that color may be possessed by them, and yet the biliary secretion be in a very disordered state. Stools preternaturally dark, although they indicate biliary action, do not necessarily authorise the inference that their color is owing to the abundance of a healthy biliary secretion. In summer and autumnal complaints, we very frequently meet with very dark,

liquid and generally inodorous stools, which so far from indicating a favorable state of the liver, should be looked upon as positive proof of a very decided functional disorder of that organ. Why Dr. Dick should assert that 'a more active peristaltic movement of the intestines,' is additional proof 'that the liver is secreting with more than usual profuseness,' we cannot understand unless he considers the action of bile upon the bowels as stimulant, which is positively forbidden by the admission he makes in another place, and which is as follows: 'I am quite convinced that healthy bile has a *sedative* effect on the intestines, and that deprived of its presence, or supplied only with a vitiated and inefficient sort of it, the mucous membrane becomes irritable, etc.' It is true, he makes a very proper distinction between healthy and vitiated bile, but that his ideas in regard to the biliary secretion, are not very clear, if they are intelligible, is proved by the following general remark: 'stools rather darker and more frequent, indicate a bile both darker and either more stimulant or more plentiful; the latter, probably more frequently, than the former.' By this we understand that a smaller quantity of bile, if stimulant, will increase the frequency of the stools, and yet he admits that its abundance merely without any stimulant quality, will still more frequently produce the same effect. This is impossible. The irritability of the bowels which is often observed in connection with dark stools, is in no way dependent on the presence of bile in them—it is evidently owing to morbid condition of the intestinal circulation and secretions. When we have dark, thin and inodorous stools, the function of the liver is very imperfectly performed, and this results from the overloaded state of its vessels, and the languid manner in which the blood moves through them, and this necessarily superinduces a similar state of the intestinal circulation. The mucous membrane of the bowels, is more or less congested, and every pathologist knows that the first effect of congestion of any part, is to augment the quantity, and often to alter the quality of the secretion peculiar to that part. Thus the mucous and serous secretions of the bowels are increased, and perhaps changed, and whatever produces these effects will render the stools more frequent and liquid. With the restoration of the organic powers employed in separating the biliary elements from the portal blood, and in elaborating them into healthy bile, the obstructed condition of the liver is removed—the

blood moves through it with greater freedom and this relieves the overloaded intestinal vessels—diminishes intestinal secretion, and abates intestinal activity.

In the abdominal affections of summer and autumn, the liver is always to a greater or less extent involved, and the restoration of healthy biliary action, is regarded not only as a favorable, but an indispensable occurrence. This being so, it must strike every one as being of the utmost importance, to be able to determine when this happens, or to be acquainted with the circumstances by which we may with confidence anticipate it. No single feature of the alvine evacuations can be looked on as affording infallible information. Though a bright yellow stool is generally favorable, it cannot be relied on when it is also thin and inodorous; though a dark stool is generally encouraging, it cannot be confided in when it is liquid and without smell; though an offensive stool is commonly auspicious, the odor which it exhales, must be natural and not cadaverous. That we may say with confidence, that the biliary secretion after having been disordered, is restored to a healthy state, the alvine evacuations must be of a yellow or rhubarb complexion, of considerable consistence, but not of ordinary solidity, and of the natural odor. Without the conjunction of all these circumstances a deranged condition of the biliary secretion, cannot be said with any truth to be completely rectified, and in the treatment of disease, it will be seen by the close observer, that in those cases in which they are all absent, if health is to be restored, they will return in succession, and that our hopes of re-establishing healthy biliary secretion, will be in proportion to the indications that are given, that the stools are resuming their natural characteristics. Most vague and indefinite notions prevail amongst physicians as to what constitutes healthy biliary action, and in consequence of this, we almost daily see committed, the most egregious blunders.—Thus we have often seen physicians contented with dark, liquid and inodorous stools, which they contended evinced sufficient and satisfactory biliary secretion, and have consequently refused to push farther such means as are known to be well calculated to reform perverted action of the liver, and their patients have thus been sacrificed at the shrine of ignorance, and prejudice, or misapprehension, when to every rational and accurately informed mind, they might easily have been rescued from danger. That such

occurrences may be less frequent in future, we trust will result from the principles we are endeavoring to illustrate.

The appearances exhibited by the alvine dejections during the progress or course of disease, are exceedingly various—so various indeed, that it would be almost an endless task to examine them in detail. We shall therefore, content ourself in the present Essay, with directing the attention of the reader to a few of those that are of the most common occurrence, and which it is the most necessary to understand. A knowledge of the nature and import of these, will be sufficient to guide the physician in the treatment of the most common or acute abdominal affections of summer and autumn.

(TO BE CONTINUED.)

BIBLIOGRAPHICAL NOTICES.

The New England Quarterly Journal of Medicine and Surgery. Editors—CHARLES E. WARE, M. D., SAMUEL PARK, M. D. No. 1, July, 1842. Boston.

This is the first number of the quarterly medical journal, which we informed our readers, some time since, was about being commenced in Boston, and if we are to judge from the number of periodicals that weekly, monthly and quarterly issue from the American press, we must conclude that medical journalism is becoming popular, if not profitable. Even during our brief career, no less than three new Richmond's have appeared in the field of earnest, and, we trust, useful competition. First came the *N. Y. Lancet*, a spirited and caustic, if not a rather unamiable laborer in the service of science; then the *Western Lancet*, which promises to deplete the too plethoric state of the science of its abstractions and absurdities; and now the *N. E. Quarterly Journal of Medicine and Surgery*, which unpresumingly believes that 'ample materials' exist to warrant a promise of its publication *for one year*, at least.' With the 'good will' of so many respectable physicians as have promised to encourage 'the undertaking,' we shall be very much surprised if it does not live to be a venerable ornament of New

England science and literature. The N. E. Journal of Medicine and Surgery, 'will appear on the fist days of July, October, January and April, each number to consist of 150 pages. Price $3,00 per annum, payable on the receipt of the first number.'

The number before us is made up in great part of a variety of articles on subjects of practical interest, and although very useful in their tendency, they are not very original in character. The communication of Dr. Thomas Gray, on *Tic Douloureux, imitated by Diseases of the Teeth*, we recommend to the consideration of the practitioner. The writer shows that a very large number of the cases of supposed tic douloureux arise from diseases of the teeth, which are to be removed by addressing our remedies to them, instead of resorting to the ordinary modes of treating that complaint.

The subjoined reflections of Dr. Gray on the hasty and thoughtless sacrifice of teeth, deserve attention. He remarks:

It may perhaps be asked, why not at once extract a suspicious tooth, and so end the doubt? I reply, not because it is unscientific, barbarous and useless—not becanse it is on a par with the practice of shooting into the tree, and leaving it to chance to decide whether patient or disease shall fall first—but because it is frequently unnecessarily insuring great discomfort to a patient's whole after life. It is a matter of some consequence to a man, whether he is to go toothless or wear artificial teeth—or, in other words, whether he is to swallow half masticated food, or be obliged to live the remainder of his life on soft or liquid food. "Off with his head—So much for Buckingham," has been the popular principle with regard to the teeth; and one which has been too much strengthened by medical influence and advice. I believe there are very few, if any, cases of simulated tic douloureux which may not be detected by a little careful and patient examination, and no victim sacrificed but the right one—and that only when the end cannot be otherwise attained. And it certainly betrays both want of skill and want of honesty, to add to the pangs of this painful disease the infirmity of a prematurely toothless life. A physician should no more extract a tooth by way of experiment, than he should amputate a limb from the same motive; and certainly he would not, could he in any degree realize the annoyance and discomfort so frequently endured from this apparently trifling cause.

The following are the directions which he gives to distinguish the genuine disease of the tooth from the false:

"Careful examination must be made by pressure upon the sides, roots and crown in every direction, to learn if their be any soreness felt.—Examine with a mirror and an instrument in every part, to learn if there be no caries. Dip the fingers in cold water, and seize the tooth between them; or inject cold water with a fine syringe about the tooth,

to ascertain if there be no sudden sense of aching. In the same manner try warm water; and conjoin this with all the historical evidence of the case. Examine, with especial care, the wisdom teeth; or the gum, if *they* are not yet through—*and, above all, reserve extraction as a last resort.*"

Dr. Gray concludes his sensible and valuable article with the following judicious argument against the indiscriminate extraction of teeth, which in the practice of physicians, as well as of dentists, we have almost daily occasion to deplore:

I cannot close these remarks without one observation. The science of dentistry should have for its exclusive object the treatment and cure of the diseases of the teeth; not, as is too frequently done, by the summary process of extraction; that is reversing its object—but by arresting the progress of disease, and retaining to the utmost possible, these valuable organs. What would be thought of the surgeon who should propose amputation of the finger joints, to avoid the pain of every little phlegmonous affection of those members; or extirpation of the eye as the cure of every little inflammation or derangement of that organ? Yet if the principle be sound in the one case, it is so in the other. Extraction, like amputation, should only be resorted to when the disease cannot be otherwise relieved; and nothing is more common than to find mouths almost wholly stripped of their teeth, in the vain experiment to ascertain if the loss of this or that tooth will not cure the tic douloureux. A scientific dentist will very rarely fall into that mistake; and the miserable results of their operations, who, instead of searching into their pathology, endeavor to treat the diseases of these organs as if they were mere mechanical bodies, and to be treated by purely mechanical means, should prove a warning, if one were necessary to the conscientious and scientific dentist.

From Dr. George Hayward's *Report of Surgical Cases and Operations*, we extract what he has said on '*Contraction of the Hamstring Tendons*,' as interesting, and of great practical importance:

A healthy girl, 13 years of age, was admitted into the hospital in September, 1840, in consequence of a congenital contraction of these tendons. It was stated that at her birth, her limbs were drawn up in contact with her back; but by the persevering use of various mechanical contrivances, they were so much brought down that at the age of seven years she could walk on her knees, her heels being in contact with the nates. Some farther improvement was made by the use of different apparatus, so that at the time of her admission she could bring the toes of one foot to the ground, though not those of the other, and with the aid of a pair of crutches she could get about on a level surface, but was obliged to go up stairs on her knees; and it was apparent that this was her easier and more usual mode of walking, for the knees were now covered with two thick, fleshy cushions. Both legs were much bent at the knee, and any attempt to extend them gave her great pain. The principal resistance seemed to be from the firm contraction of the ham-string tendons. On the 14th of October the outer ham-string ten-

don of one leg was divided in the usual subcutaneous method by Dr. Warren; this gave but little pain at the time, and no inconvenience ensuing, all the ham string tendons of the other leg were divided on the 20th, and on the 28th the two internal ham-strings of the leg first operated on were divided. The aparatus for extension was not applied in any instance till the wound in the integument had healed, and the patient suffered but little from the use of it. The limbs slowly but gradually came down, so that by the 18th of November, the best limb was nearly straight, and she could bring the sole of her foot to the floor, bearing the greater part of the weight of the body on it without causing much pain. She was discharged on the 18th of January, a little more than three months after the first operation, "much relieved." Her sufferings had been slight during her treatment, and her general health was unimpaired. At the time she went out, the sole of one foot was fairly brought down, and she touched the floor with the toes of the other when she walked, so that with the aid of crutches she was able to get about on her feet with comparative ease. There can be but little doubt, that with proper attention on her part, a much greater degree of improvement will take place.

It should be stated that this was by no means a favorable case. There was some mal-formation about the knees, and the insertion of the tendons was much broader than is usually met with. Yet notwithstanding, she gained more in three months by the operation, than she had in the preceding thirteen years. I say by the operations, because the apparatus that was applied was of the simplest kind, and because far more complicated and powerful machinery had been used before her admission to the hospital, with comparatively slight benefit.

There have been two other patients on whom this operation has been performed in the hospital, with a very good degree of success.

One of these was a little girl 11 years of age. She entered in May, 1840. Five years before her admission, she received a blow on her right knee, which was followed by severe inflammation; she was under treatment for a year, and then partially recovered, the knee being bent, the patella fixed and ham-string tendons tense. At the time of her admission, she could not touch the toes of the affected limb to the floor while erect.

On the 30th of May, I divided the tendons of the biceps femoris, the semimembranosus and semi-tendinosus. So much inflammation followed, that extension was not applied till the 15th of June. This was continued together with friction, the warm spout bath and passive motion daily, with gradual improvement till July 4th, when after free exercise, considerable inflammation occurred in the whole joint. This yielded to warm fomentations, &c., in five days, and the extension was then re-applied. On the 22d, she could place her foot on the floor, while standing in an erect posture, and bear most of her weight npon it. She was then discharged at the request of her friends, who were desirous that she should return to her home, which was some distance from the city. At the time she left the hospital she could walk with tolerable ease; and though the patella was still fixed, the motion of the joint was somewhat improved.

The improvement in this case was rapid and very great; and when it is recollected for how short time the extension was applied, it must be attributed principally to the division of the tendons.

On the subject of fractures Dr. Hayward remarks:

Another recent improvement in the treatment of fractures, is the introduction of the cold water dressings. These are especially valuable in compound fractures, but they are also highly useful in all those cases of simple fractures in which there is any considerable degree of contusion, or injury of the soft parts. In former times, the great object in compound fractures, was to promote the sloughing, and where this cannot be accomplished, to limit it as far as possible. The cold water dressings and local bleeding by leeches, are among the most powerful agents in effecting this. Instead, therefore, of applying hot fomentations and poultices in a case of compound fractures, cloths dipped in cold water, frequently renewed, are all the dressings that are now deemed requisite in the early stages. They have the advantage of allaying the inflammation far more than the old method, and they are at the same time much more comfortable to the patient. In several cases I have been satisfied that gangrene was prevented by the adoption of this course.

The New York Medical Gazette:—It is stated that Dr. Roberts has retired from the editorial charge of this Journal. This is news to us, for until now, we were not aware to whom the medical public was indebted for the candor and independence with which it has been conducted. This, however, is to be the case no longer, for we are told:

The public and the subscribers have, as we conceive, a right to know who it is that speaks to them; especially is this the case with a periodical like the New York Medical Gazette, which, while it meddles not with the private affairs or the personal characters of men, has spoken and will continue to speak, its own honest opinions of the literary and scientific merit of their publications. The public require such honest expressions of opinion—they are tired of the eternal complimenting, the mawkish sugar and water criticisms, by which some of our journals strive to *avoid giving offence*, and to keep fair weather with all parties.

With such paltry policy, the Gazette never had, and never will have any thing to do. We value peace as highly as any man, *that is a man can*, and we should deeply regret giving, to any of our medical brethren, just cause of offence; but we cannot sacrifice truth or independence of opinion, either to gain peace or to avoid war.

PUBLISHERS ADVERTISEMENT.

The subsciber respectfully informs the patrons of the New York Medical Gazette, and the Medical public generally, that he will on the completion of the second volume, (July 13th, 1842) assume the publication of that periodical, when some changes will be made in the Editorial de-

partment of the work, and in its mechanical character, which will he flatters himself, render it worthy of an extension of the very liberal encouragement which it has hitherto received.

After the 13th of July, when the second volume will be completed, the Medical Gazette will be edited by

C. R. GILMAN, M. D., Professor of Obstetrics and the Diseases of Women and Children, in the College of Physicians and Surgeons, New York, assisted by

GEORGE WILKES, M. D. Surgeon of the New York Eye Infirmary, and

ROBERT WATTS, Jr. M. D. Professor of Anatomy in the College of Physicians and Surgeons.

In the extended reputation of these gentlemen, the publisher believes that the Medical Profession throughout the country have a perfectly satisfactory guarantee of the high literary and professional character of the work.

The change in the form and mechanical execution of the work will be such as to make its appearance conform to its high literary character. Advertisements will no longer be admitted into the body of the work; this will enable the Editors to give from one to two pages more weekly of reading matter, and a yet further extent of space will be gained by printing the Gleanings, &c. in small type. The Gazette will be issued in a handsome cover, upon which medical advertisements will have place. Altogether it will be the endeavor of the publisher to render the work, under the charge of the present able and distinguished Editors, creditable to the character of American Medicine and universally exceptable to the members of the profession.

The Gazette will be published as heretofore, every Wednesday. Price $3 per annum—payable in advance. After three months $4. No subscription received for less than one year.

WILLIAM A. LE BLANC, Puelisher.
No. 377, Broadway.

MONTHLY PERISCOPE.

Hydrosudopathy.—We have already advised our readers of the new humbug, that is exciting the wonder and emptying the purses of the people of Europe, and which, we suppose, will soon lay this country under contribution, and therefore, for the benefit of those who are always ready to be led away by every foolish fancy, we insert truly admirable description of the process, to which, doubtless, they are impatient to submit:—*Ed. Recorder.*

It requires great patience and perseverance to go through the cold water cure, and it is decidedly the most discouraging of any other. I shall give you an exact account of what I have to go through every day, as well as all other persons who are able to bear it. The attendant comes into my room at 5 o'clock, A. M. with a wet sheet as cold as ice. I get up, while he puts a large thick blanket on the bed over which he lays the sheet, which I have to stretch myself on, when he wraps it close all about me, and then regularly packs me up, so that I am unable to stir a limb, and then puts a soft down bed over all. I remain in that enviable state for one hour; my first impression was that I should be perished to death, but in about fifteen minutes I was in a most comfortable heat and generally slept until 6 o'clock, when the man enters and unpacks me, taking the sheet away leaving the blanket close about me, when I then go to the bath room, which is situated but a few steps from my bed room, when I plunge in head and heels. I am then well dried, and after being dressed, I set out to walk until 8 o'clock, when I go to breakfast, first taking three or four tumblers of cold water, and about six more before night. Fancy about three hundred persons from all nations sitting down to breakfast on bread, butter, and milk, there being no tea or coffee allowed; we have also abundance of strawberries, so that I assure you we all feel perfectly content, and enjoy it much: at 10 o'clock I must be in my room to undress and take a douche bath, which at first I did not get enamoured with. The water is conveyed in wooden pipes from the mountain, and is as cold as possible. When that is over and I am dressed, I have but a short time to walk, and as I must be in my room again at half past 11 o'clock, where a sitz bath is brought in where I remain sitting for twenty minutes, after which I have until 11 o'clock to amuse myself in the best way I can, when the dinner bells ring and we all congregate as we did in the morning. The room is a a very fine one, being 120 feet long by 50 broad and capable of dining 500 persons, which number and more are here under cure, but a great many stop at Frywalden, a small and neat town one mile, and where

Prissnitz goes twice a day to visit his patients. You would suppose I had the remainder of the day to myself, but not so, for at 5 o'clock I must again go into the wet sheet, and take the bath after, as in the morning. We meet at 8 o'clock to breakfast; I am generally in bed by ten, but not before the man comes in with two long wet linen bandages, which he puts round my waist, and at the back of the neck, and between my shoulders, by way of making me comfortable for the night. You can fancy from the above how I am to pass my days here, that I have not much idle time on my hands. I did not mention that in addition, I have to swallow from twelve to fifteen tumblers of cold water. Graffenberg is a very high hill in the centre of three valleys, and what makes it very picturesque, it is all finely wooded at the top, and walks made all through on the sides, with numerous seats of all dimensions, placed for the company: and an amateur band comes from Frywalden twice a week to play, and on every Sunday there is a full band that plays all the time we are at dinner, and again after supper, when such as are inclined, commence dancing."—*Dublin Journal Medical Science.*

Prolapsus Uteri.—Dr. Dommes of Hanover has resorted to the following most extraordinary method of relieving prolapsus uteri. He thrusts a trocar through each labium in the situation of the posterior commisure; through this wound a leaden wire about four inches long is passed, and its ends are twisted together so as to retain it in its place. The object of this is to prevent the perforations from closing, and as soon as the wound has healed, which it generally does in a few days, a silver ring is substituted for the leaden wire. This ring is about the size of a sixpence and opens and shuts with a hinge. The Doctor in this way cured a case where there was a very extensive laceration of the perineum and a prolapsus uteri before deemed incurable. The patient married and became pregnant, (the ring having been removed we take it for granted.) This is certainly new, and to our unsophisticated notions not a little odd. The naturalists tell us of ring-tailed baboons, but ring-tailed women we believe were unknown till the time of Dr. Dommes of Hanover. "*Hommage a l'auteure,*" as they say in Paris--the man who has thus presented to us with another variety of "the last best gift to man,"—the ring-tailed woman.—*New York Medical Gazette.*

This is certainly novel, but we presume not more so than a ring-tailed man, an account of one of whom we read many years ago in a French Medical Journal, under the classical name of *Infundibulation.* An Englishman while resident in Lisbon, formed a tender *liason* with a woman, who became excessively jealous, and on one occasion, when she was amusing herself with him, drew the prepuce completely over the glans, and forced through it the hasp of a small pad-lock, and fastened it. The foramina thus produced were permanent, and when he entered one of the Parisian hospitals, and was urged to disclose the cause of them, made the above

statement, adding that he had suffered the lock to remain fastened, except on certain occasions, to quiet the jealous fears of his mistress.—*Ed. Recorder.*

Gonorrhœal Ophthalmia.—The manner in which this affection is propagated, has been very thoroughly invested by Dr. T. F. Piringer, and eminent German, and he concludes that it is exclusively by contagion. He proves that it never occurs as the result of metastasis or sympathy, but is always owing to direct inoculation.

This latter circumstance points to the simple translation of the gonorrhœal virus to the eye by mechanical means as the true cause of gonorrhœal ophthalmia. For during the active stage of the secretion the greatest care is always observed to wash the fingers after the care the disease requires—the more so as the quantity is great and easily visible—but later when the quantity is so slight as to be scarcely perceptible, careless persons become negligent and then inoculate themselves directly with the fingers or by washing the face with an apron or cloth, upon which they have carelessly wiped them.

It is also to be remembered that the disease is most general among the commonest classes who have little regard for cleanliness, and the multiplicity of cloths they are compelled to use.

It is exceedingly rare for the disease to appear simultaneously in both eyes, but in one several days later than in the other. It also confines itself wholly to one eye, when it runs a rapid and severe course, if great caution be observed in washing the eye to prevent translation of the matter. For the most part the right eye is first affected, as the right hand is mostly employed in the necessary manipulations of the sexual organs and most frequently used to rub the eye; when circumstances exist to require frequent use of the hand about the eyes, a gonorrhœa will seldom terminate without occurrence of ophthalmia.

A servant girl affected with chronic ophthalmic catarrh used the sponge and collyrium of an officer who had a gonorrhœa, and in two days was attacked with violent gonorrhœal inflammation in both eyes. The care of physicians is requisite to warn their patients of such carelessness, not only in gonorrhœal cases but also when from any cause whatever a discharge exists from the sexual organs. (See several cases of inoculation related from persons sleeping together using the same towels, etc. also among soldiers living in the same barracks.) Quite false is the very general idea, that a gonorrhœal ophthalmia arising from simple inoculation of the virus is less dangerous, virulent and rapid.

All do not possess the same susceptibility to the inoculation. In the same manner as of the persons who have frequented the same woman, only one receives a chancre or gonorrhœa, so inoculation of the virus in the eye is occasionally totally inert.

Close observation and careful experiments with fresh gonorrhœal matter have convinced me, says Piringer, that the inoculation into the eye of this virus, always produces a true ophthalmo-blennorrhœa and not a mere

blephero-blennorrhœa. The only exception being in the cases when on the first appearance of the inflammation thus excited, active remedies have at once been employed. Further experience is necessary to ascertain whether a slight blennorrhœa of the first degree may be produced—some experiments, however, appear to confirm that the cold serous secretion produces either no effect on a healthy eye or an inflammation of the first degree.

The translation of the gonorrhœal virus to the eyes is the cause of the frequent occurrence of ophthalmic blennorrhœa in new-born children, and instances of its non-appearance when such discharge exists, are clearly attributable to the fact that the conjunctiva has been protected during parturition by the closure of the palpebræ. Were this not the case, why should not the sexual organs of new born children as well as the eyes become affected? When, however, ophthalmia neonatorum exists, and the mother has been perfectly free from all abnormal secretion from the sexual organs, it is evident that other causes of this disease must exist. The genital blennorrhœa of such children is also a proof, that under certain circumstances the disease may arise without previous inoculation among adults—as it sometimes happens that a woman may herself become affected with a blennorrhœa, without having had previously an impure connection and communicate it to others. Of this truth the frequent sporadic and epidemic blennorrhœa is also an evident proof. It may, however, be observed, that of these causes one seldom operates alone, but several conjointly—and that each may operate sometimes as a predisposing, and sometimes as an exciting cause.

New York Med. Gaz.

From the New York Lancet.

Remarks on the Portal Circulation. By Professor Millington.—In the last number I received of your valuable periodical (No. 19, 7th May, 1842) you introduce a short paper 'On the Signification and Ends of the Portal Circulation,' by Dr. R. Willis. This commences by stating that it has seldom or ever been asked, 'why is there such a singular departure in the circulation of the liver, from the ordinary mode of the circulation in general?' &c. &c. It certainly is strange that so important a point of physiology should have met with so little attention.

Dr. Willis, in his paper, comes to the conclusion that the portal circulation is established as one of the economical operations of nature, of which many beautiful examples present themselves to all her close observers—and that it is in fact, 'a contrivance, a most admirable contrivance, to economise arterial blood.' In other words, if so large a viscus as the liver required to be sustained by arterial blood, it would be necessary for the lungs to purify and prepare a larger portion of venous blood for arterial circulation than is now necessary.

My attention was first drawn to the portal circulation, many years ago, by Dr. Jas Curry, when he was Senior Physician in Guy's Hospital, London, while I was one of the lecturers attached to the medical school of that establishment. The Doctor had resided in the East Indies, where hepatic derangements are common, and he devoted much of his attention and study to the liver. We proposed making some experiments on human

bile, which had then not been much examined. But his sickness and death, and my want of leisure, prevented their prosecution. The attention I then gave to the subject induced me to adopt an opinion, that I have not since seen good reason to change, though I confess it wants the further corroboration of observation and experiment for its confirmation. To the best of my belief, it is original, as I have not met with anything accordant with it in my reading; and as it does not exactly agree with what is set forth by Dr. Willis, I take the liberty of sending it to you, and putting it at your disposal. If you think it new, and worthy of consideration, you can print it in the Lancet, in the hope that it may draw the attention of anatomists and physiologists to a further investigation of the subject. If otherwise, consign this paper to the flames. I shall state the leading feature of my views, as briefly as possible, Physiologists are in the habit of stating that two circulations are always going on at once in the body, a major and a minor, or in other words, a general and a pulmonary one. My belief is that there are three—a general, a pulmonary and a portal or hepatic one. The great mass of blood furnished to the liver by the portal system, appears more than can be necessary for the sustenance of that viscus; moreover, the liver is known to have another circulation, independent of the portal one; that of blood derived by the hepatic from the cæliac artery, which by its other large branches also supplies the stomach, the spleen and the pancreas. The liver has veins which communicate with the vena cava, and my opinion is that the hepatic artery is the nourishing artery of the liver, by which the liver partakes of the general circulation, while the portal circulation may be performing other offices; in the same way that the heart is nourished by its coronary arteries and circulation while it is performing its part in the general pulmonary distribution of blood. It is generally admitted that arterial blood, when it leaves the left ventricle, is thin, florid, and well suited to be distributed through the arterial ramification, but by the time it reaches the right auricle, it is so changed in color and consistence, by absorbing carbon, nitrogen and perhaps other principles from the body, that it would soon become unfit for the functions of circulation; and hence it is discharged into the lungs, that it may come into contact with the oxygen inhaled, in order that it may be purified by absorbing that oxygen, a part of which combining with the carbon is exhaled as carbonic acid gas, and thus the blood is said to be purified and prepared for a second arterial circulation. There is no doubt, I believe, of this fact; and I therefore admit fully that the venous blood, by passing through the lungs, receives all the purification that exposure to atmospheric air is capable of affording it. But it does not follow, as a necessary consequence, that mere exposure to air will make such a change in *all* the ingredients, the blood may take up, as shall render it quite fit for circulation; and it requires no very deep observation to perceive that the blood requires other changes to be wrought upon it, besides what occur in the lungs. There can, I think, be no doubt but that the urinary organs afford an additional means of alterating or purifying the blood, and rendering it fit for future use. If the discharge of urine was merely to get rid of any superabundant fluid that had been introduced into the stomach, it would be more simply effected by its accompanying the other fæces; or by a direct passage from the stomach. But as urine never

proceeds directly from the stomach, but is extracted from such blood as enters the kidneys, we see clearly that the kidneys are glands for drawing away that from the blood which would be detrimental to its action if it remained in it, and which is not simply water, but often other matter that leads to lithia diseases. If, therefore, the kidneys are glands accessary to the purification of the blood for future use, why should we deny that so large a gland as the liver should not be for a similar purpose? As the hepatic and portal circulation are independent of each other (except by occasional anastomosis,) the liver may be fed and sustained in its functions by arterial blood furnished through the hepatic artery, and may thus be enabled to operate on the blood while it is in the minute ramifications of the portal system, after it has entered the liver. It appears to me that venous blood is thrown through the liver, not for the purpose of nourishing it, but of becoming purified by the action of the liver, from such materials as the lungs are incaple of taking away from it, but which must be abstracted from it, before it is returned to the heart again. The liver is the gland for secreting bile, and that fluid is said to be necessary to complete the operation of digestion and excretion. This is fully admitted, and in a clinical point of view, the alkaline reaction of the bile seems well suited to neutralize the acid quality of the gastric juice, while its stimulating property may be useful in exciting the peristaltic and other actions of the intestines; and as nature does nothing in vain, this very bile, so necessary to the due operation of the intestinal canal, may be formed of the materials that the blood has taken up in its circulation, but which must be extracted from it before it is fitted to renew its circulation.—The analysis of bile made by Thenard, and more recently by Tiedeman and Gmelin, shows that it contains a coloring matter, a resin, and the sweetish and bitter material, *Picromel*, besides several minor principles, that are not found in the blood, and therefore do not seem to belong to it; and these are the materials which, in my opinion, the liver is destined to act upon, or to take up from the blood, and to discharge in the form of bile, a part of which may be necessary to complete the action of the stomach and bowels, while such parts as are inactive, pass away with the general fæces. The use of the spleen is problematical. It has a large artery to supply it—numerous fine ramifications within its body—and although it has no excretory duct, it has a vein that runs immediately to the vena porta. May not the spleen be a gland for extracting resin or picromel or some principle from the blood that may be a necessary ingredient of bile? Have any experiments been made to ascertain whether any change of bile, or of biliary action, takes place when the spleen is enlarged, or otherwise diseased? And may not the pancreas in like manner be working some change in the blood carried to it, by its artery, and given back in the duodenum as pancreatic juice? These are objects appearing to me worthy of inquiry, and which may lead to new physiological deductions. I urge none of these points as facts, because my time and opportunity have not permitted me to investigate them. But if worthy of attention, I hope they will not be neglected by such who have leisure and the means of prosecuting them. I beg to apologize for having trespassed so long on your space, and shall conclude by saying that instead of the portal circulation being formed to economize arterial blood, my opinion is, that the

blood undergoes three distinct partial purifications in the venous circulation which together make a perfect operation. Taking the order of succession in that circulation, the kidneys first take up any superfluous aqueous matter, urea, &c.; next the liver takes up the resinous and more solid parts, and renders the blood fit to enter the right auticle and ventricle; and lastly, the lungs finish the operation by the gaseous transformations that then take place, and thus prepare the blood for again passing the arterial circulation.

I am, yours, &c.,

JOHN MILLINGTON, M. D.

William and Mary College, May 18, 1842.

The above remarks contain hints very analogous to, and some of them perfectly identical with the views which we have already illustrated and explained in the three last numbers of this Journal. For the suggestion he makes in relation to a third circulation i. e. a portal or hepatic circulation, we have contended for many years, and we have never failed to teach it to every class to which we have lectured. Our views on the subject will be explicitly stated, in a subsequent number, when we come to speak of the *Nature of Fever.—Ed. Recorder.*

Results of Revaccination in the Prussian Army, in the Year 1840. By Dr. Lohmeyer.—In the last year there were vaccinated in all the regiments together, 43,522 individuals. On these the cicatrices from previous vaccinations were

distinct in - - - -	34573
indistinct in - - -	6177
not discernible in - -	2772

The pustules produced by the present vaccinations were

regular in their course in - - -	20952
and irregular in - - - - - - -	8820
and no effect at all was produced in -	13750

The vaccinations that had thus taken no effect were repeated,

with success in -	2831
without success in	8958

The numbers of genuine pustules produced were as follows

1 to 5	in	10021
6 to 10	in	5875
11 to 20	in	4171
21 to 30	in	885

Of those who had been successfully vaccinated in 1840, and previously, there were attacked during the past year

with varicella - -	7
with varioloid - -	2
with true variola -	1

In the past year more frequently than in any other, the vaccination was performed with lymph taken from genuine and regular vaccine pustules on adult persons; for past experience has consequently led military practitioners to be more strongly convinced that for the vaccination of adults, lymph taken from adults is to be preferred to that taken from children, and that it produces a more powerful reaction, and more strongly-developed pustules. And that the pustules thus produced do actually protect from the contagion of small-pox is proved by this, that in the 4th corps, in which the plan has been long followed of vaccinating adults with lymph taken from good postules in other adults, there has not occurred, during three years, a single case of any variety of small-pox among those in whom the vaccine pustule ran its ordinary course, nor more than one case among those who were unsuccessfully revaccinated, although small-pox was more or less rife in the neighborhood in which the corps was quartered.

The result of past years have shown a regularly increasing ratio in the proportion of successful vaccinations to the number altogether vaccinated; and this increase has continued in the year 1840, for of 43,522 revaccinated, 20,952 have exhibited genuine and regular pustules. Of all the revaccinations, therefore. 48 per cent. were successful; while in 1839, the proportion was only 46, in 1837 only 45; in 1836, 43, in 1835, 39; in 1834,37; and in 1833, only 31 per cent. The proportions varied in 1840 between 40 per cent., and 60 per cent., in different regiments.

With respect to the advantage of revaccination as a preventive of small-pox, the experience of 1840 proves it in a striking manner; for during that year there occurred 74 cases in the whole army, and of these 46 were cases of varicella, 21 of varioloid disease, and only 7 of genuine small pox. Of the last two proved fatal; and neither of the patients had been revaccinated after his enlistment. In general, just as former years, most of the cases of spurious and genuine small-pox occurred in recruits soon after their enlistment; and before they had been revaccinated.—Of those who had been revaccinated it has been already stated that only ten were affected, and of these, 7 had varicella, 2 varioloid disease, and only one a genuine variola.—*Medical Examiner, from British and Foreign Med. Rev., from Medicinische Zeitung.*

Injections in Gleet.—Mr. H. J. Johnson, (formerly of the Lock Hospital,) has used in old gleets a solution of the nitrate o' silver, as strong as one drachm of the nitrate to an ounce of water. Mr. Harding used ten grains to the ounce. Mr. Streeter has found the solution of the sulphate of copper when used with judgment and care, the best remedy in old gleety discharges. Mr. Acton believed that all the good effects of the nitrate could be obtained by using a solution of two grains in eight ounces of water—his object was not to produce inflammation but to change action.—*New York Med. Gaz.*

Anomalous Result of an Operation for Stricture of the Urethra.—On the 22d of Aug., 1840, I visited John Bradshaw, an athletic Englishman, of sanguine temperament, 30 years of age. He had retention of urine

for the preceding two days, caused by a debauch and exposure to cold, aggravating a permanent stricture of seven years' standing. On attempting to pass the smallest catheter, it went, as near as I could judge, to that part nearest the bulb, but would go no further. I was equally unsuccessful with the smallest bougie. The bladder was greatly enlarged, being distinctly evident to the feel in the pubic region; severe expulsive pains, in character and frequency precisely similar to those of labor, were constant; pulse full, unyielding, and varying in the intervals of pain. On inquiring into his habits and occupation, was informed that he was a brewer, and accustomed to drink beer *ad libitum*; in his own words, from a quart to a gallon a day.

There being no convenience for the warm bath, and the case not admitting delay for the trial of opium or the mur. tincture of iron, I drew blood in a sitting posture *ad nanseam*, directing the patient to be raised at short intervals to encourage faintness, and to ensure that state tart. emetic solution was also directed. This was continued for an hour, with no benefit; not the smallest discharge of urine followed. The pulse, with the patient's previous habits, forbidding further depletion, I commenced the use of laudanum in doses of gtts. c. every hour, with gtts. xxx. mur. tincture of iron. This was continued for five hours, with no effect whatever. It was now midnight, and the patient's condition demanded immediate relief. The depletion he had already undergone, with his intemperate habits, rendered it proper, on a first view of his case, to select the most simple operation for his relief; the rectal puncture of the bladder would undoubtedly have afforded it, but having, on two previous occasions, in men of similar habits, found that operation followed by great cystic irritation, in one instance proving nearly fatal, I thought it proper to give the patient the chance of a radical cure. He had several times been subjected to great distress from the complete closure of the urethra after irregularities, which his habits rendered of frequent prospective occurrence. With the assistance of Dr. Vandervoort, of this city, I performed the operation of cutting into the stricture. I will state the steps succintly, because the result that followed has entirely baffled my ability to explain.

The patient being tied as for lithotomy, and a catheter introduced down to the stricture, an incision was made through the perineum; two or three lesser ones brought me to its point near the bulb of the urethra; upon turning this aside, I exposed the point of the catheter above the stricture. My patient bearing the operation very ill, it being midnight, and the wound very deep, with a bad light, I lost no time in searching out the contracted part of the urethra. There had been considerable hæmorrhage from an artery which we found it difficult to secure, but made a cautious incision from the point of the catheter in a direct line with it and the raphæ of the perineum, upon the vesical portion of the urethra; this evidently incised the stricture, for there was a rapid gush of urine, amounting to half a pint, as near as could be judged from its rapidity. What was my astonishment to find it instantly cease on withdrawing the catheter, and a full stream of urine passing through the penis. An attempt was made to find the opening of the urethra nearest the bladder, but I failed in doing so, owing to the exhausted state of the patient and the badness of the light.

He was placed on his side, a pledget of lint being left in the wound; the patient spent a good night. I visited him early in the morning, designing to search out the orifice and pass a catheter; but on questioning him respecting his urine, I found he had passed it with perfect freedom through the penis, none having issued through the perineum. I removed the pledget of lint from the wound, and did not think it proper under such circumstances to attempt to pass the elastic catheter, which I had intended, as usual in such cases, to leave till the urethra had united. The case progressed to a cure without an unfavorable symptom; not a drop of urine issued at any time through the perineum, and the patient now passes a full stream of urine, not only when temperate, but during his customary debauches. The largest catheter will also pass freely into the bladder.

Remarks.—This case is to me quite inexplicable. First, the reader will observe, the stricture was permanent, the patient for years having passed the smallest possible stream of urine, often guttatim for weeks together. This, with the severe depletion and anti-spasmodic treatment he underwent, no less than 500 drops of laudanum in five hours, together with the mur. tincture of iron, a remedy of established efficacy, forbids the idea of its being spasmodic in any degree. Secondly, the point of the catheter being exposed, and then the incision being made directly from it to the veiscal portion of the urethra, and followed by a copious gush of urine, proves that the stricture was fairly incised. Why, then, did not the urine continue to pass through the perineum as the more ready outlet? and why did no traumatic stricture follow, though no catheter was introduced? I confess I am unable to answer. Some of your readers may. I publish the case, because I think we are all too much in the habit of setting forth our smooth cases, to the exclusion of such as may possibly show forth our own dullness. E. H. Dixon, M. D.

Boston Med. & Surg. Journal.

New York, May, 1842.

Cure for Sore Nipple.—In a case which I attended some time ago, I tried several of the means mentioned by Velpeau without any effect.—They are generally greasy, nasty, painful, or poisonous applications.—Now, you want an application that will not be injurious to the child, and that will thicken and toughen the nipple and the surrounding integuments. It occurred to me that a solution containing tannin might have this effect. I first tried the decoction of oak-bark: upon another occasion I applied the tincture of catechu. This answered perfectly: the nipple, which had been intolerably painful for weeks, and was denuded, returned to its natural state within a day or two, and the mother, who was about to wean her child in despair, was able to suckle it for more than twelve months, without any inconvenience.

The tincture of catechu should be applied twice a day with a camel's-hair pencil.—*London Lancet.*

Diagnosis of Ascites and Ovarian Dropsy by Percussion.—Dr. Watson, in his lectures, points out the manner of distinguishing these affections by percussion.

In true ascites the relative place of the liquid and of the intestines is determined by the posture of the patient. The bowels, which always contain some gas, float to the upper part of the liquid, and there give out (when the finger, as a pleximeter, is applied to the corresponding surface, and struck) their peculiar resonance. Mediate percussion will thus follow the gravitating fluid, and discover always a dull sound in the uppermost part of the abdomen.

But it is not so in ovarian dropsy. The cyst, in a diseased and enlarging ovary, rises in front of the intestines, which, being tied down by the mesentery, cannot embrace the tumour so as to reach its anterior aspect, but are in fact pressed back by it towards the spine. Hence, if there be any resonance produced by percussion, it is in one, or the other, or in both, of the flanks; and the umbilical region yields a dull sound whatever the position of the patient may be. The same is true of the enlarging womb in pregnancy.

This simple expedient, then, is quite decisive. In ascites the epigastric or umbilical region is tympanitic on percussion; in ovarian dropsy it is dull. To be quite sure it is well to make the patient assume different postures in succession. If the person affected with ascites turns upon her side, the uppermost flank will become resonant; the umbilical region dull: whereas in ovarian dropsy, the sounds remain severally where they were under every change of position.

Dr. Watson alludes to three exceptional cases.

1. The distention, in true ascites, may be *so* great, that the mesentery shall not be broad enough to allow the buoyant intestines to reach the surface when the patient is supine. Dr. W. has seen such a case.

2. The intestines may be tied down, and so prevented from ascending, by their specific lightness, to the upper part of the surrounding liquid. And this may happen, either in consequence of the adhesion of the various coils of the intestines to each other, and to the parts behind them; which is not an uncommon occurrence:—or the intestines, though unadherent, may be swathed, as it were, and bandaged down, by a thickened and diseased omentum.

3. Dr. W. once knew an ovarian cyst to exist, when the umbilical region was tympanitic under percussion. The case furnished just that kind of exception which serves to prove a rule. This was also a hospital patient. Her *history* was the history of ovarian dropsy. Some time previously she had discovered a small tumour in one of the iliac regions. It increased without much disturbance of her general health, until it became very inconvenient from its bulk. She was then tapped in one of the Borough hospitals: and she stated distinctly that it was not a clear watery fluid that was evacuated: but a glutinous, mixed, and grumous matter: such as belongs to ovarian disease. No doubt could be entertained that the enlargement of the abdomen resulted from disease of that kind. Yet the umbilical region, when percussed, always rendered a hollow sound. Upon the death of the patient the mystery was solved. Air hissed forth from the opening made by the scalpel through the abdominal parietes; and the source of it being traced, an ovarian cyst, of considerable magnitude, was found adhering to the peritoneum in front of the belly, and containing no liquid, but some yellowish shreds

only; the remains, apparently, of some smaller included cysts. This ovarian bag had been filled with air, and had given occasion to the equivocal sounds.

Dr. Watson alludes to the possibility of confounding a much distended bladder with ascites. John Hunter once made this mistake, and operated.—*Med. Chirur. Review.*

New Theory of Tinea; its supposed Vegetable Origin.—A few years ago a young Hungarian physician, M. *Gruby*, announced, as the result of an extensive series of microscoprical observations, that the cutaneous disease, known by the name of tinea or favus, is owing to the development and growth in the skin of uryptogamous plants of the genus fungus, which he has called *micoderme*. He tells us that they exhibit the aspect and form of such vegetable productions from their earliest appearance to their complete maturity, at which stage, if divided and examined with a magnifying-glass of two or three hundred powers, he has distinctly recognized the fruits or sporules in the interior of their cavities, as we observe to be the case in other fungi. He is of opinion that the disease is propagated by these seeds. This novel idea of the etiology of the disease has excited much attention among the French dermatologists; and it is but just to M. *Gruby* to acknowledge that the researches, which have hitherto been made on the subject at the St. Louis Hospital in Paris, have tended to confirm the accuracy of his statements.

The treatment, naturally suggested by this theory of the disease, is that of applying caustics or whatever is calculated to destroy the vegetable substance.

M. *Devergie* has, during the last year, been giving an extensive trial to a solution of the acid nitrate of mercury (of the French codex:) the spots become at first of a reddish yellow colour, and subsequently black after the application.

M. *Emery*, of the same hospital, is in the habit of employing a strong solution of iodine for the same purpose, and it has appeared to answer extremely well.

In another article in the same journal, Dr. *Pelet* recommends an epilatory ointment; as, in his own opinion, the only prospect of effecting a rapid cure depends upon extracting the hairs from the diseased spots.—This gentleman's experience, however, cannot well be trusted to; as he tells us that tinea is never present where the hairs have fallen out, and that the method which nature follows is always by the removal of the hair. He tells us, too, that all internal and external remedies are of little or no use until the hairs are extracted, or fall out spontaneously. It would seem, from what he says, that the empirics, MM. *Mahon*, have more success in the cure of the disease than any of the regular practitioners in Paris: their plan consists in applying, first, a strong lixirial soap to the head, and then an epilatory plaster, which, when removed, draws the hairs off with it.

Dr. *Pelet* recommends the following formula for an epilatory ointment and powder:—

Take of Soda (of commerce)	60 parts.
Slaked lime	4
Lard	120
Mix together.	
Take of Quicklime	120 parts
Powdered charcoal	8
Mix together.	

After cutting the hair very short, the crusts are to be detached by applying linseed poultices to the scalp, and washing it repeatedly with soap and water. After several day's use of these means all the affected parts are then to be rubbed with the ointment: this is to be repeated daily.—The swelling and redness of the scalp gradually subside, but without ever ceasing entirely. The pustules, the successive reproduction of which keeps up the disease, become more rare and appear only at long intervals. To effect this change, from two to three or four months are often required. When this is the case, a pinch of the powder is to be sprinkled among the hair every second day or so. The hair becomes gradually loosened, so that it can be easily detached with the fingers or with a forceps, without causing pain. When the affected parts are rendered quite bald, the treatment is nearly at an end; all that is necessary is to anoint the head with a small portion of the ointment every two or three days, and to keep it exceedingly clean.—*Bulletin de Therapeutique.*

Physiology of the Nervous System: confirmation of Sir C. Bell's Views.—We have been much pleased with the perusal of a candid review, in the Gazette Medicale, of a work recently published at Paris by M. *Longet*, and entitled "Experimental and Pathological Researches on the properties and functions of the bundles of the Spinal Marrow and the roots of the Spinal Nerves, with an historical and critical examination of the various experiments made upon those organs by Sir *Charles Bell*, and others, &c."

The great discovery of the English physiologist had of late years, we are told, began to be questioned, and even by some to be fairly denied; for we find that, at a Meeting of the Academy of Medicine, about two years ago, one of the members undertook to demonstrate that the doctrine of the difference of function in the roots of the spinal nerves was a mere hypothesis devoid of all solid foundation. This bold assertion was certainly combated by several of the gentlemen present; but the effects of the discussion that then took place was certainly to leave a general impression that the views of *Bell* had received a decided check, or at least that its weak side had been exposed. It was with the view of fairly setting the question at rest either one way or the other, that M. *Longet* undertook a series of experiments, which were afterwards repeated in the presence of such judges as MM. *Flourens*, *Blainville*, *Gerdy* and *Blandin*, and the result of which has been, in the language of another distinguished member of the Academy, M. *Breschet* "to give a mathematical demonstration of one of the most important facts in the whole range of physiological science." We (the Rev.) might say that this mathematical demonstration had been already afforded by the beautiful experiments of Muller, of Berlin, on frogs, the

earliest notice of which in English medical literature appeared in the pages of this Journal.* The French have thought otherwise; and glad we are that the question at issue may now be considered as fairly settled even by them; for we cannot conceal our abhorrent dislike of what they call vivisections, in which unoffending brutes are made the victims of the most shocking sufferings, all with the view of advancing science! Rather perish science, we almost feel inclined to say, if it cannot be promoted save by outrageous cruelty; but, thank Heaven, there is but little need of such bloody experiments as are far too frequently resorted to by the medical men of the French school.† What a different example has been set by the great English physiologist of modern times, the author of that very discovery which we are at present considering—a discovery, the beauty and value of which are co-equal with that of *Harvey* himself.

The work of M. *Longet* is divided into three parts. The *first* is occupied with a minute critical examination of all the various experiments, which have been performed by different physiologists from the period of Sir *C. Bell's* first announcement of his views down to the present time.

"This review," says the writer in the *Gazette Medicale*, "will by many be considered severe; but no one can have a right to complain; for there is nothing personal or arbitrary in it; and if it appears at times somewhat rude, it is because facts speak for themselves, and their language is often anything but polite, as we all well know." In reference to the experiments made by several authors on the anterior and posterior roots of the spinal nerves, M. *Longet* disapproves entirely of the plan which has been usually followed—that of merely dividing one set of them in order to judge of the effect of such a division by the paralysis either of sensation or of motion which may ensue. "The laying open of the spinal canal, independently of every other mutilation, must greatly affect the motory power of the animal; and hence, if the operator then proceeds to divide the posterior roots the loss of motion that *may probably be* observed proves nothing, for this good reason, that it was nearly gone already. He therefore gives a decided preference to the use of *irritation* (galvanic) over that of simple *section*, in judging

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*Vide the Medico-Chirurgical Review, for January, 1834. The interest and value of the paper in question are greatly enhanced by its having elicited from Sir *Charles Bell* himself an admirable letter addressed to Dr. *Johnson*, and which is published in the same number. It will amply repay the trouble of referring back to it, not only for the facts which it communicates, but also for the comments which the distinguished author makes on the French physiologists.

†Shakspeare says, with no less truth than beauty, of Cymbeline's Queen—who was an amerteur experimenter with "poisonous compounds" on animals!—

"Your Highness
Shall from this practice make hard your heart:
Besides, the seeing these will be
Both noisome and infectious."

of the effects of such experiments. The loss of sensation in any part will always, be it remembered, influence to a very considerable degree its powers of motion under the application of mechanical or chemical stimuli."

Muller, however, it must be remembered, has anticipated by several years this very remark of our author, as may be seen by referring back to the account which we gave of his interesting experiments on frogs in this Journal, for January, 1834.

The *second* part of M. *Longet's* work is devoted to a critical narrative of the pathological arguments in favour of *Bell's* doctrine furnished by the histories of numerous recorded cases of disease. "Nothing," says the French reviewer, "can be more conclusive than the mass of facts thus spontaneously supplied by nature, and all converging to one point. The observations, however, being drawn from various published works, this circumstance, although it is a fresh guarantee of their authenticity, tends to deprive this portion of our author's volume of that original interest which attaches to the first and third portions We shall only remark that, if the number of conclusive cases which he has brought together seems to be very small, this does not arise from his having designedly excluded any that appeared contradictory of his system, but solely from his unwillingness to admit any except those which contained a definite and well-marked result, whether for or against *Bell's* doctrine. Thus out of 250 recorded cases of diseases of the spinal-marrow which he has passed under review, he admits not more than 20 in which the lesion was ascertained on dissection to be limited to one of the bundles, or to one of the series of roots, and in which the symptoms during life had been prominently marked. We may add that of these 20 cases one only has appeared at all opposed to the theory of *Bell*, and the details of this very case are so very imperfect that we cannot fairly regard it as a conclusive exception."

In the *third* section of his work M. *Longet* gives an excellent description of the numerous experiments and researches which are peculiar to himself, with the view of determining the functions of the fasciculi of the spinal marrow, and of the anterior and posterior roots of its nerves. The number of the experiments which he has performed on dogs and other animals amounts to no fewer than 330, many of them too in the presence of the most competent, and sometimes even prejudiced, winesses. The results of these experiments have been so uniformly in favor of *Bell's* views, that we may well say with M. *Breschet*, that our author has given the *mathematical demonstration* of a fact which many physiologists obstinately continued to dispute, even after the experiments of *Muller*, *Panizzi* and *Valentin* were known to the public. The almost unvarying uniformity in the results obtained by M. *Longet* can only be regarded as the consequenees of an established law in the animal system.—*Med. Chiur. Rev.*

Cases illustrating the action of Benzoic Acid in Affections of the Urinary Organs.—[This is a new remedial agent, and in some of the troublesome diseases of these organs may be of no little service.]

CASE I.—Joseph L——d, aged 77, a dissenting minister, residing in this

neighborhood, became my patient some months ago, in consequence of a very painful and often difficult passage of his water, an affection under which he had labored for years, but especially during the winter season. He has been a widower for many years, and his habits have been uniformly and strictly regular and temperate. He has been remarkably free from illness of every description previously to the present complaint. There is no perceptible disease in the prostrate gland, and he has never been troubled with gouty symptoms. He has undergone a variety of treatment from his professional advisers, from which he occasionally derived partial and temporary relief. Their appears to be a glairy mucous sediment in the urine, in which on examination, some gravelly particles may be discovered. The pain, however, at this time (which was early in December last,) especially in voiding his urine, was very great, and did not yield to fomentations, anodynes, and detergent balsams, which were very judiciously resorted to. The benzoic acid, in doses of from five to ten grains, was ordered along with the balsam of copaiva, three or four times a-day, with the addition of a small quantity of the tinctura camphoræ composit., and by persisting in its use for several weeks, the urine became less turbid, and the pain and frequent desire to make water gradually left him; and, at the distance of two months from the day he commenced the benzoic acid, he described himself as free from his troublesome symptoms, and is at this time improved in his general health, in a manner which has surprised as well as gratified all who know him.

Among a considerable number of cases of patients of the Huddersfield Infirmary, to whom I have successfully administered the benzoic acid, I will select the following, all occurring within the last four months:—

Case II.—William Hastings, aged 64, a widower, and formerly a man of very intemperate habits, applied for relief for frequent pain in the loins and distress in voiding his urine, which had especially of late, been loaded with gravelly particles, and considerable deposition of mucus. Had been treated with mercurials under an impression that his symptoms were in a great measure, if not entirely, dependent on hepatic derangement; but though relieved in many respects, yet he continued to experience frequent pain in the loins and in the region of the bladder; nor did his dysuria abate in the smallest degree for several months, though under medical treatment and in the use of the usual remedies, until he had for a considerable time taken the benzoic acid mixture, varied from time to time, according to circumstances. On the 14th of this month he visited the infirmary, with *all* his symptoms effectually relieved, and considers himself as in a state to be dismissed as cured from the institution.

Case III.—Robert Harley, aged 68, residing at Henley, was admitted an out-patient of the infirmary, January 3, with a complaint in his bladder, as he termed it, accompanied with occasional rigors and pain in the loins. He parts with his water with great difficulty, and it is usually turbid; attributes his complaint merely to cold, as he has enjoyed a good state of health, and is, from his own account, a man of temperate habits. Except occasional aperients he took no other medicine than the copaiba and ben-

zoic acid mixture, and at his last attendance at the infirmary considered himself quite relieved in all his symptoms. This was one of the milder description of cases, arising from his age more than from any other cause.

Case IV.—John Brook, aged 97, was troubled last winter with great uneasiness in making water, for which he received relief from medicine and dietetic treatment. He was admitted an out patient of the infirmary in the early part of this winter, with an attack of his old complaint of more than ordinary severity. The pain was very great in passing his water, which, he says, comes away in drops; says that he has been more or less troubled with this affection for three or four years, although a man of temperate habits; apparently no part is affected but the urinary organs, and his bowels have been kept regular by occasional aperients. The use of linseed tea and barley water causes less distress in passing water, though there is still a considerable sediment. This man took little else than the balsam of copaiba mixture, with the benzoic acid, for about six weeks, when he expressed himself as decidedly relieved, and in the enjoyment of more ease than had fallen to his lot for the last few years past.

There are some other cases of a similar description, occurring in patients at an advanted stage of life, which I find in my note-book, but differing so little either in the symptoms or the treatment, from those already described, that I should be inexcusable in occupying your pages with mere repetition. I may mention, however, that in one of the cases the use of the benzoic acid mixture was followed by a rash over a great part of the body. This, however, is a circumstance by no means peculiar to benzoic acid, as other medicines have in some instances, from some peculiarity of temperament, produced the same effect. Permit me to recommend, therefore, to your readers a further trial of the utility of this powerful acid. It is very sparingly soluble in cold water, but is soluble without change, in alcohol. The benzoates, however, I believe, are soluble in water, and the benzoate af ammonia may, in some instances of dysuria senilis, prove more efficacious than the simple acid. The benzoic acid is a constituent of balsam of Tolu, of Peru, benzoin, storax, &c. &c. It will probably be found that, in other complaints as well as diseases of the urinary organs, its efficacy may be much greater than we have hitherto been led to expect.—*Med. Examiner, from Provincial Medical and Surg. Jour.*

Dyspepsia and Cachexia.—Dr. Marshall Hall, in a paper entitled "*Observations on the Prevention and Treatment of Apoplexy and Hemiplegia,*" recently read at a meeting of the *Medical Society of London*, suggests an opinion as to the nature of dyspepsia which is fundamentally the same with that which we have been advocating for years, and which may be found at page 163 of this Journal. Dr. Hall thus speaks:—

There could be little doubt that in dyspepsia the blood itself became contaminated; and, as it were, *cachectic*; on this principle we accounted

for the appearance of furunculus and paronychia; for the morbid condition of the tongue and interior of the mouth, the general cutaneous surface, the secretions, &c. He had so often observed symptoms threatening the apoplectic or hemiplegic attack, in conjunction with symptoms of dyspepsia and cachexia, that he had no doubt of the vast importance of a strict attention to this subject. The very day (Oct. 1, 1841,) he had been consulted by a medical gentleman from Birmingham under these circumstances. One form of this affection was the following: vertigo occurred with faintishness, sickishness, and a cold clammy perspiration; sometimes there was actual sickness, sometimes much flatus. In these cases the feet and other extreme parts were apt to be cold. The secretion of the liver was frequently defective, and the urine was apt to deposit the lithic acid salts. Nothing could be so injurious as blood-letting. In no case was the loss of blood repaired with such difficulty. The application of a few leeches frequently left a state of debility and pallor which were felt and seen for weeks. The treatment consisted in the correction of the secretions, and in the infusion of tone and general health into the system. The compound decoction of aloes, the infusion of rhubarb, of gentian, of cinchona, singly, or better, mixed together; sarsaparilla; the vinum ferri; the bicarbonate of potass, stomachics, tonics, and antacids, in a word, were the principal internal remedies. But with these a mild, nutritious diet, a system of gentle exercises, early hours, the tepid salt-water shower-bath, and a strict attention to the condition of the feet and general surface, by means of the flesh-brush, flannel, and a frequent change of shoes and stockings, should be conjoined. Those engaged in the harassing affairs of a London life should sleep in the country, and cherish the utmost quiet of mind.

Extract of Belladonna in the Reduction of Paraphimosis.—By Mignot, of Bordeaux.—A child, three years and a half old, was the subject of severe paraphimosis; the glands red, swollen, and tender; the prepuce strongly drawn back, forming a thick and apparently adherent ring, the constriction of which completely stopped the circulation. This state had lasted eight days, and the sufferings were excessive. Reduction being impossible, leeches were applied to the perineum and hypogastrium; cooling drinks, emollient enemata, cataplasms, lotions, and hip-baths were used, but they only gave slight relief and but for a short time. The strangulation became more menacing, and all the symptoms were aggravated; the glans was bluish and gangrene was threatened, when M. Mignot employed frictions around the glans, with an ointment composed of thirty parts of simple cerate to twelve parts of extract of belladonna. Under the influence of this remedy the circle of constriction relaxed, dilated, and the tissues gradually recovered their normal condition, without loss of substance or suppuration following.

The second patient had acute balanitis, brought on by a severe gonorrhœa, and followed by paraphimosis. The patient refused operation although gangrene was threatened, when the belladonna was applied, which induced relaxation and rapid amendment. It was also applied in a case of phimosis accompanied by chancres and a sympathetic bubo,

and three days after its employment the dilatation of the preputial orifice was complete.—*Brit. and For. Med. Rev.*

Use of Compression in Mammary Abscess: by MM. Trousseau and Contour.—In this memoir there are two distinct parts; one devoted to the description of abscesses of the breast, the other intended to recall the attention of practitioners to a curative means too much neglected in their treatment, namely, compression. The following is the mode in which it is to be applied:—It is to be accomplished by strips of plaster, broad, and sufficiently long to go several times round the body. The surgeon, standing by the side of the patient, must first fix one of the extremities of the strip to about the middle of the back, then carry it towards the side of the chest, then pass it over the breast, beginning from the lowest part, then obliquely from below upwards to the outer third of the clavicle on the healthy side, and then obliquely downwards across the back, so as to cover the extremity of the slip already fixed. Following this course several times, he must take care that the portion of the band applied each time covers the two upper thirds of the preceding turn. But it is easy to see that if the bandage is always carried in the same direction, the breast cannot be completely covered; and that, on the other hand, as its several turns go across the clavicle of the healthy side, the movements of the shoulders would tend to displace it, and the lower part of the breast might soon be uncovered. Other strips of plaster are therefore applied, which, proceeding from the anterior and upper part of the abdomen, ascend, crossing the first obliquely; then pass under the axilla, and return, after passing over the posterior part of the chest, to the part where they were first applied, and then are carried again along the same track, covering each time the two upper thirds of the strip last applied. The breast is thus completely covered by the bandage, which is prevented from rising by this last described, which ought to cover only the upper part of the breast.

To compression thus employed the authors attribute many advantages. In the first place, it immediately relieves the pain; it combats and diminishes the inflammatory engorgement, at whatever period it is applied. When employed after opening the abscess, it decidedly favors the evacuation. And although when employed too long, at a period when the process of suppuration is active, it might have the disadvantage of making the pus extend over a larger surface, yet this may be avoided by removing the bandages at a time when it is probable that matter has fairly formed. If this be done, and the abscess opened, the bandages may be again applied. after two or three days poulticing, with good effect.—*Lond. Med. Gaz.*

Diet.—In the following sentiments of Dr. Billings, as the readers of this Journal must be aware, we fully agree. Indeed on more than one occasion, we have endeavored to disenamour physicians of their great faith in protracted starvation and of their excessive confidence in debilitating remedies. Considering the popularity which the *Principles of Medicine* of Dr. Billings have al-

ready obtained, the sentiments expressed in the subjoined paragraphs must be regarded as, in a high degree, confirmative of the truth of our precepts, and the correctness of our practice:

"We cannot have a better opportunity than this of explaining the rule for diet; and it will be seen that some old popular sayings, resulting from experience, are based on truth—*e. g.*, "feed a cold, and starve a fever." It will be found, generally speaking, that it is not necessary to *starve* a fever; one of the first evidences of fever, however slight, being want of appetite (anorexia.) Natural instincts are too often thwarted; it is much too common to put patients empirically on low diet; and patients of the higher classes, the better educated, very often put themselves on low diet unnecessarily. How frequently have I been consulted by persons for aggravated catarrh, which they said was "getting worse and worse, though they had been living low, taking slops, and no wine," and, perhaps, opening medicine. The nerves and capillaries, which would have recovered their tone under the ordinary diet, were thus kept debilitated by the unnecessary sedative treatment.

The cases just described are curable in a few hours by animal food, a glass of wine or other fermented liquor, and a dose or two of any opiate, unless, perhaps, the outraged stomach have lost its appetite, in which case a few days' tonic treatment will be required to undo the mischief. Thus, so far as we may take natural instinct for a guide, we may assert, that when a patient *can* eat, he may be allowed, to do so; for if he have even a slight degree of fever, he *cannot* eat. This will also direct us in the use of wine, &c.; the loss of appetite, showing feverishness, requires the withholding of stimulants, except that sometimes, in chronic cases and convalescence, delicate persons require a little stimulus to the stomach to induce them to begin to take food. Again; so long as the appetite continues good, fermented liquors may be used; but as no rule is without exceptions, so there are of course many both medical and surgical cases of inflammation, in which, though the appetite have not failed, it is necessary to forbid stimulants.

The practitioner will find it of no disservice to consult carefully, and follow strictly the following judicious reflections of Dr. Billings on the "*diet of dyspeptics*:"

It appears to me that there has been much error with respect to the management of the diet of dyspeptics. Practitioners often restrain them, or they debar themselves, from food which they consider very liable to ferment, such as fruit, vegetables, weak wine, and beer. The stomach should be cured, and made to digest such food as is fitted for it, and presented by bountiful nature. It is true, that stomachs which have been debilitated, whether by disease or by their natural powers having been exhausted by over-feeding, and especially by indulgence in the stronger wines and spirituous drinks, will permit the development of acid from such food; but this is of little consequence, for by perseverance in avoiding alcoholic liquors, and in the use of proper tonics, such as bismuth, the sulphuric, nitric, and hydrocyanic acids, gentian, cascarilla, &c., the most censured articles of food above mentioned will form the best, from

being the lightest, nourishment. Persons who seek to prevent acidity by introducing into the stomach merely plain meat and bread, and drinking dry wines only, do not succeed; for in a short time, even these wines, whether port, sherry, or madeira, occasion the formation of acid; brandy and water is then tried, but to no purpose, as these materials will turn intensely sour in the stomach. Moreover, nothing is more injurious than this "regularity" of diet, for the sameness of food produces sluggishness of the bowels, for which variation of diet is the best remedy. Every change of diet, sometimes the use of vegetables, sometimes their omission, sometimes wine, sometimes beer, or any other drinks, will prove a fresh stimulus to the peristaltic motion, which languishes when there is no variety.—There are no better beverages for dyspeptics than ginger or spruce beer, which have the agreeableness of fermented liquor with scarcely any alcohol. Ripe fruits and lemonade do not produce acidity, but rather refresh and strengthen the stomach. It should be observed, that lemon, though sour, is a ripe fruit, and does not disagree, like sour oranges, or other unripe fruit. I differ from many practitioners, in allowing ripe fruit to persons suffering from thirst in gouty and calculous diseases. These originate in indigestion; and as vegetables and ripe fruit promote digestion and allay febrile heat, they rather assist than retard the cure, besides the refreshment they afford the patient.

Medical Memoranda.—It is said that a successful experiment had been made in London, by several distinguished physicians, in removing a cataract from the eye, by means of galvanism. The subject created a good deal of interest.——It is stated that Dr. Murphy, of the Lying-in-Hospital, Dublin, has been appointed successor to Dr. Davis, as Professor of Midwifery in University College, London.——An attempt was made on Monday, 23d of May last, to set fire to Harvard College, in Cambridge, Mass. It was discovered in Massachusetts' Hall, and happily extinguished with but trifling damage.——It is stated by M. Velpeau, that the tubercles which result from the rupture of the hymen, instead of always becoming atrophied, oocasionally enlarge, and may be mistaken for polypi or the effect of the venerial disease. Astringent lotions, or excision, will effect a speedy and perfect cure.——In the *N. E. Journal of Medicine and Surg.*, a case is alluded to in which a very large gall-stone obstructed the ductus communis, which produced an attack of jaundice in December, 1840. 'Since that time, there had never been any *appearance of bile in her discharges.* Her symptoms were faintness, exhaustion, *diarrhœa,*' etc.; proving as we have alleged in a previous number, that the peristaltic motion of the bowels, is not dependent on the presence of bile in them. ——*Physical Causes of Suicide.*—From the examination of the history of 1,333 cases of persons who have committed suicide, and whose bodies have been examined after death, the following analysis has been made.

Thickness of cranium, 150. No apparent structural change, 100. Bony excresences, 50. Tumors in the brain, 10. Simple congestion of brain, 300. Disease of the membranes of brain, 170. Disease of the lungs, 100. Softening of the brain, 190. Appearances of inflammation of the brain, 90. Disease of the intestines, 50. Disease of the liver, 80. Suppressed, 15. Disease of the heart 10. Syphilitic disease, 8. Accretions of the membranes of the brain are often found in suicides. The *Dura mater* is often ossified, the *pia mater* inflamed, and arachnoid tunic thickened. Osiander considers congestion of the vessels of the brain a common cause of suicide.—*Winslow's Anatomy of Suicide.*——It is stated in an Austrian Journal, that a case of croup which had obstinately resisted many remedies considered efficacious, was cured by the assiduous application of cold fomentations to the head and neck which were changed every three minutes, and cold water given to the patient to drink. This was done while preparations were being made to perform the operation of teacheotomy, so desperate was the nature of the case.——In Curtis' *Treatise on the Eye* a case of Amaurosis which resulted from smoking, and which was cured by relinquishing the injurious habit, is recorded. ——Bunge Thompson died on the 8th of last May, in North Carolina, in consequence of the bite of a rattlesnake, in twenty-four hours after receiving the wound, just above the ankle.——A young physician, in Rome, is said to have discovered the means of petrifying dead bodies, or parts of them, without changing their color materially. The process is effected, readily in a few days. He has exhibited birds, fishes, flowers and human heads, beautifully changed to stone. This seems to be the art which was lost by the sudden death of Dr. Segato, of Florence, about four years ago.——Dr. Higgin records in the *London Lancet*, an interesting and very aggravated case of *Traumatic Tenanus*, which he cured by opium and blood-letting.——As a means of preserving Cantharides, M. Martin recommends placing them, either entire or in powder, in rectified sulphuric æther, in the proportion of five parts of the fly to one of æther, in bottles stopped with emery; and he assures us that thus prepared they can be kept for three years.——Dr. Joslin records in the *N. Y. Lancet* a case in which a child was born laboring under small pox, in consequence of the exposure of its mother, whose system had been, by vaccination thirty years before, perfectly secured. Such cases show a sufficient connection between the maternal and fœtal circulations to allow of morbific principles being transmitted through the former into the latter.——Dr. Robert Bridges has been appointed Professor of Chemistry in the Philadelphia College of Pharmacy, in the place of Dr. W. R. Fisher, resigned.——Dr. Alfred C. Port, of the city of New York, has accepted the chair of

Opthalmic Anatomy and Surgery, in the Castleton Medical School.——The Medical Faculty of the University of New York have purchased the edifice formerly known as the Stuyvesant Institute. This fine specimen of architecture was built by an association of gentlemen at an expense of $120,000.——M. Orfila has brought his researches on the absorption of mineral poisons, to a close, and it is said, there may be detected in the liver and other viscera, lead, zinc, tin, gold, iodine and mercury, in cases where death resulted from their administration.——Sir Charles Bell's body was examined after death, and it was found that he suffered under disease of the heart with considerable ossification.——Observations have been published by M. Dumars on the great value of tannin in cases of uterine hæmorrhage. He employs the tannin in the form of pills, mixture, and injections; but the following is the one which he prefers:—Tannin grs. 36, ext. op. gr. 1, conserve of roses, enough to make 20 pills. One pill every hour until some impression is made on the hæmorrhage. In a report on phthisis made at Martinique, by M. Rufy, the reporter observes, that phthisis is less an hereditary disease transmitted from parent to child, than a congenital disorder proper to children issuing from the same family.——Some kinds of animal food are digested with more facility than vegetable food. Bread and coffee require about 4¼ hours; fresh beef, from 3½ to 5½; salt beef, from 3½ to 5½; salt pork, from 4½ to 6; mutton, 3¼ to 4½; fowl, 4; veal, from 4 to 5½; tripe, 1; and pig's feet 1. ——We learn that throughout the greater part of England and Ireland, and some districts of Scotland, epidemics are raging among horses and cattle, of a most fatal character. They are altogether different from those that have lately prevailed, both in the character which they assume and the increased mortality by which they are attended. Sheep are rapidly beginning to be involved in the general destruction.——Professor Hall records a case in which abortion was produced by the iodide of iron. The female was about three months advanced in pregnancy and she took the medicine three weeks in doses of gr. ii., three times a day dissolved in alcohol.——Dr. Lizars, Dr. Handyside, Dr. J. Robertson, and Dr. James Millar, are mentioned as candidates for the Chair of Surgery, rendered vacant by the death of Sir Charles Bell.——Dr. Jansion, in the *London Medical Times*, recommends the internal use of hydrocyanate of iron in epilepsy, which he regards almost as a specific in that disease, when not dependent on organic changes.——The following ointment is recommended by Dr. Copland for fissures about the annus:—R. Hydrag. nit. oxyd., dr. i., Adipis, drs. iii. M, ft. unguent. saepeutend. —Dr. Handy has resigned the chair of Obstetrics in the Washington University of Maryland, Dr. Jennings has assumed it, and Dr. Bond has been elected to the

chair of Therapeutics.——Two lads of Lisbon, (Me.) were poisoned on the 11th ult., by eating the water-hemlock, which they mistook for sweet sicily. The poison proved fatal in both case; one of the boys died on the same evening, and the other on the following day.——The first Astley Cooper prize of £300 under the will of the late great English surgeon, will be on the thymus gland. The condition is—that the essays written for the prize shall contain original experiments and observations—to be written in English or Latin before the 1st of January, 1844, and addressed to the Physicians and Surgeons of Guy's Hospital, London.—The French Academy of Sciences have awarded to M. Tanquerel-des-Planches, a prize of 6000 francs for his work on diseases caused by lead; and another of 4000 to M. Amusat, for his researches on the introduction of air into the veins.

To Correspondents.—Dr. Little's article on *Stramonium* will appear in the next number. The case denominated *Congestion of the Stomach and Bowels*, was one of *Purpura Hæmorrhagica*, and presented nothing novel or uncommonly interesting in its character, but was treated with judgment and skill.

The article of Dr. McNelly, on *Tetanus*, which we received some months since, was mislaid, and we not were able to place our hands upon it, until a few days ago. It shall appear in the next number.

To Subscribers.—The ninth number of the *Medical Recorder* has been designedly delayed several days beyond the regular day of publication. We wish to fill up the present with the first, so that we may be enabled to commence the second volume with the ensuing year. We trust that those of our friends who have very flatteringly encouraged us thus far, will use some exertion to enable us to commence the second volume under auspicious circumstances. Several alterations in the Journal are contemplated, which, we doubt not, will tend to enhance its value very much.

TRANSYLVANIA UNIVERSITY.

MEDICAL DEPARTMENT.

Professors Mitchell and Cross, will lecture, gratuitously, during the month of next October. Their lectures then will not interfere with, or impair the value of those which constitute their regular winter courses.

THE

WESTERN AND SOUTHERN MEDICAL RECORDER.

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No. 10. LEXINGTON, KY. AUGUST, 1842. Vol. 1.

ESSAY ON THE NATURE AND IMPORT OF STOOLS IN DISEASE.

BY THE EDITOR.

(Continued from page 403.)

Green Stools.—During infancy it is not uncommon for green stools to pass from the bowels, that are copious, thin, mixed sometimes with mucous flocculi, that resemble closely chopped grass or spinach. Alvine dejections more or less green in appearance, are sometimes passed by adults, but they are not so liquid as those that come from children. In regard to the source of such dejections, much discrepancy of opinion exists amongst pathologists. That this should happen must be a matter of surprise to every thinking mind capable of taking a comprehensive view of the subject. Cystic bile is green or black, and therefore, green stools should be ascribed to the liver unless the most postive proof can be adduced that they come from some other source. Such proof, however, has not been appealed to, and pathologists have suffered their minds to be haunted by the wildest conjectures, simply because some authors have ascribed an excessive importance to the liver, and others have preposterously exaggerated the evils which result from the use of mercury. Cystic bile as we have said, is of various shades of green or black, the color of it depending upon the length of

time it has been retained in the gall-bladder, and when black, if diluted with water it becomes green. Now, notwithstanding this obvious source of green stools, the truth has been overlooked, and far-fetched explanations of them have been sought, such as the superabundance of acid in the stomach, the use of calomel and intestinal irritation.

It must be recollected that bile is not green when it is secreted, but assumes that color during its transit to, and retention in the gall-bladder, and it is therefore, an acquired property, which results from changes that are produced in it after its exclusion from the sphere of vitality. Green stools, consequently, coming as they do, and as we shall presently prove, from the liver, cannot be looked upon as even morbid in any other light than as being formed of materials more disposed, than in health, to run into those changes, upon which the sensible properties of cystic bile depend. This we say because either from the influence of disease, or from the action of medicines, as is proved by the copiousness, and frequency of green stools, the biliary secretion remains but a short time in, if indeed it is permitted in all cases to pass at all into the gall-bladder.

But let us examine the explanations that have been given of the stools under consideration. As we have said, they have been ascribed to the acidity of the contents of the prima viae. This supposition is rendered wholly incredible by the fact to which Abernethy and Ayre testify; and which is that in those cases that proved fatal during the passage of green stools, precisely the same fluid was found in the bile ducts and gall-bladder. In several fatal instances of hydrocepholus this observation we have been able to verify, but not, of course, in other diseases in which green evacuations occurred during their progress, for when properly treated they generally terminated favorably.

We are told by Professor Graves in his Clinical Lectures, that 'most practitioners think that this green color is derived from bile which the mercurial has brought down in unusually great quantities from the liver, excited to a more energetic action of secretion. It has nothing to do with the bile in many cases, but is entirely derived from the irritated membrane of the intestines.' How does he know this—what is the proof of it? It is, we feel at liberty to say, an idle assumption. In a natural state the mucous membrane of

the bowels forms no such product from the blood, and when irritated we have no proof that its secretion is capable of undergoing any such change. Did Professor Graves or any other pathologist ever find the contents of the bowels green, without finding a similar color characterizing the contents of the gall-ducts and gall-bladder? No, we are sure he never did. Then his opinion must be looked upon as a gratuitous assumption, for it ascribes to the intestinal mucous membrane, a secretion entirely unlike what it pours out in a normal state, while it denies to the liver the production of stools precisely analogous to the fluid which, in such cases, may be found in the biliary apparatus.

But how does Professor Graves remedy green stools? Hear him! The proper mode of treatment we would suppose, should consist in the enforcement of such means as are calculated to sooth and quiet the irritable mucous lining of the bowels, and as the liver, according to the view he has taken of the subject, is in a perfectly normal state, those agents which modify its action are not indicated. In such cases, he remarks, 'warm baths, the application of rubefacient liniments to the abdomen, the use of antacids, such as chalk mixture, the carbonates of soda and ammonia, small doses of laudanum, and *hydrarg. c. creta.* with Dover's powder, form the best remedies.' He says when green stools occur in adults, 'the best plan of treatment is the Abernethian *blue pill at night*, and a mild aperient in the morning, will be sufficient to correct the intestinal derangement, particularly if assisted by a well regulated diet, and exercise in the open air.' Mercury, which, we know, exerts a most potent agency in rectifying disordered states of the liver, and for that purpose was given by Abernethy, is relied upon by Professor Graves, to cure green stools. This it does by subduing an irritation that, in many cases, is closely allied to inflammation. The utility of large doses of mercury in mucous irritation or inflammation of the bowels, if not positively prejudicial, is, at least, questionable, and if there is one practical point in regard to which our convictions are irreversible, it is that small doses never fail to exasperate such lesions. Although Professor Graves evidently relies on mercury for the correction of green stools, the truth of the allegation we have made against it, is fully admitted by him. He says: 'It is on account of the property which calomel and other mercurials, exhibited internally, possess of causing irritation in the first instance,

and if pushed further, inflammation of the mucous membrane of the intestines, that they are also apt to produce discharges from the bowels, copious, fluid, and mixed with green mucous flocculi, resembling closely chopped spinach.'

'From the effects of various acids upon bile out of the body,' says Dr. Powell, 'in producing a green color of it, and from the similar appearance which is found in the fæces, we are led to suppose that the same cause produces the effect in either instance. I have added the gastric acid to yellow bile, with a view to these effects, and have found the green muddy colour, and flocculent precipitation of the serous part, to follow the same way as when other acids were used. This green appearance, then, is to be considered as a morbid alteration produced in the bile, by the application of an extraneous matter, after it has left its secreting organ.' Then for the correction of green stools, so frequent in the complaints of children, so far as they are to be considered an object worthy of the attention of the physician, alkaline medicines are indicated, inasmuch as they promise more than any other class of remedies. We do not know exactly what acids acting on bile out of the body have produced, but we do know that alkalies given internally will not correct green stools. Ammonia, soda, potassa, magnesia, and creta preparata have often been given to children with green stools, and we have never seen such articles produce any beneficial change in them, while a few doses of calomel and prepared chalk have achieved, in that respect, all that we desired. From these comparative results, the reader will be enabled to determine how far green stools are to be regarded as the result of the action of acids on the biliary secretion.

Among the many discrepant and wholly gratuitous conjectures that have been ventured as to the source of green stools, we find even Dr. Armstrong ascribing them to calomel—thus encouraging idle prejudices against a most valuable remediate agent. He thus speaks:—'Some authors say there are hydrocephalic stools, that is, evacuations which indicate the presence of hydrocephalus interness; but from those authors I differ in opinion. Calomel and Scammony will change the appearance of the stools to a green color, with a sickly and feint smell; or to an appearance like chopped spinach, which is produced entirely from calomel, I think.—This is sometimes inducing practitioners to continue calomel to a

great extent, thinking these stools morbid. Here we see amongst those who are determined not to consider the liver the source of such dejections, the most irreconcilable hypothesis entertained. While Professor Graves, who considers mercury amongst the best remedies for them, maintains that they result from morbid irritability, and that mercury itself is capable of producing that very irritability of the bowels, Dr. Armstrong asserts that green stools are not morbid, but result from the action of calomel on the contents of the bowels, and that it, of course, should not be resorted to for their correction. This shows how little is known by the ablest writers as to their nature and source.

The following case fully refutes the several untenable conjectures we have just considered, and also points to the real source of green evacuations. Dr. Mills in his work on '*Disorders of the Brain*,' records a fatal case of diseased brain in the treatment of which not a grain of calomel had been employed, and yet throughout its whole course green stools were passed by the bowels. He says, 'During the illness the fæces were greenish, an appearance commonly imputed to the use of calomel, but which is more properly referable to the condition of the bile; green bile was found in the gall-bladder and ducts, whence it was traced to the small and large intestines, every where tinging their contents with green of a deeper or lighter shade, according to the quantity and nature of the matter with which it was mixed.' In two cases of hydrocephalus, which proved fatal while green stools were being voided, the secretion, found in the gall-bladder and ducts was very similar to, if not identical with that which was found in the intestines, and which had passed from them for several days before death.

So entirely exempt is calomel, according to our observation, from having any tendency to produce the variety of stools under consideration, that we have for many years, regarded it as the safest and most certain remedy that can be given for their correction. That preparation of mercury, with or without prepared chalk, or the blue pill, has been uniformly relied on by us, and we never have had, as we can conscientiously aver, any good reason to suspect it of producing them, or of keeping them up. On the contrary, with the exception of those cases in which the brain was seriously involved, and in which, independently of abdominal disorder, there was sufficient cause of death, we have rarely found

much difficulty in bringing about such a state of the biliary secretion, as would cause their removal.

Confiding in the truth of the practical views we have announced on this subject, we would, in addition, venture to admonish the reader, that when under the use of calomel, green or spinach colored dejections change their character for the better, he should not expect them to resume, at once, the bright yellow complexion characteristic of healthy stools, for they will become of a much darker green, and sometimes they will be observed to be nearly black, after which if the mineral is properly persevered in, they will become of a less and less dark color and in a few days they ultimately exhibit the proper hue.

It does not seem difficult to point out the cause of some of the misconceptions that exist in relation to green stools. Sometimes when they had not been previously observed, calomel may bring down a green stool, and may seem to have produced it. This may be owing to the biliary secretion, having been retained in the hepatic apparatus until such a degree of decomposition had taken place as to give rise to the green color of the bile, or if not retained in the gall-bladder, it may be formed of materials, which causes it, with unusual facility, to run into decomposition. That these suggestions are more than probable, is proved by the efficacy of calomel in correcting such dejections which it certainly would not do if they depend upon its action on the contents of the bowels. That calomel should be suspected as their cause, is not very surprising, when we reflect on the obstinate manner in which they are sometimes observed to persevere under the use of calomel. In this the physician suffers himself to be deceived. When there is decided hepatic derangement, it is useless to expect its perfect rectification from one, two or three doses of calomel—it is often very slow in taking hold of that organ, and we frequently find it necessary to continue it for days in succession, before such an impression can be made on it, as is desirable. An energetic enforcement, however, of the practice, will generally attain the object we have in view, and then green dejections will cease to come from the bowels. Now, in such cases, it would be a little remarkable if the physician, whose notions of the source of such stools, and of the best way of correcting them are vague and indefinite, should not be discouraged, and be inclined to blame the remedy, simply because he does not know how to use it.

From the midst of a multitude of proofs that might be adduced, we select the following case, which is to be found in the Ed. Med. and Surg. Journal for 1825, to show how little reason there is for regarding calomel as the cause of green stools. It was one of Hydrocephalus, as was evinced by the most conclusive symptoms. For the space of twenty-five days, the patient lay in what was considered an almost hopeless state, and during the whole time he took calomel, and yet his dejections were of a spinach color. At the expiration of that time, the constitutional action of the mineral was made manifest, and immediately the stools lost the color by which, for so many days, they had been characterised. A restoration of health was the result. In this case there were green stools under the use of mercury for twenty-five days, during which time it did not seem to have made any impression on the biliary secretion, but the moment there was evidence that the whole system was brought under its influence, that secretion was altered and the patient began to improve. We have never seen a case of Hydrocephalus, in which there was the peculiar, and by some considered characteristic green evacuations present, that terminated favorably, in which mercury was daily given, (and I believe it was thus given in every instance) that took a favorable turn, before there was proof of an improvement in the biliary secretion. So that so far from agreeing with Dr. Armstrong and others, in the opinion that calomel causes green stools, having often seen them disappear under its influence, we consider it one of the best and most certain remedies for their correction. It does not produce the matter of green stools, but it causes its dislodgement from the gall-bladder and ducts, or causes their elements, which have an unusual tendency to run into putrefactive decomposition, to be rapidly eliminated from the portal blood.

Black Stools.—The alvine dejections during the course of disease, often exhibit a very black appearance, the cause of which has given rise to very dissimilar opinions. That the exact source of so remarkable a change in the stools, should be understood, all will admit when it is remembered that they almost uniformly occur in cases of disease involving more or less of danger, and when, consequently, it is very important that proper therapeutical agents should be employed.

We are of opinion that dark stools, when they do not result from alimentary or medicinal articles, are always owing to a vitiated or a

concentrated healthy biliary secretion; and this opinion we shall be able to render sufficiently probable in the course of this Essay. It has, however, been held by numerous practical writers that dark or black dejections owe their color to the peculiar character of the intestinal secretions. Besides the undeniable fact, familiar to all physiologists, that the secretions of the bowels, in a natural state, are colorless, it should be recollected that the alvine dejections have never been known to assume a dark or black appearance in cases of incontestible torpor of the liver. If they come from the bowels this must frequently have happened, when we know how invariably we meet with concomitant intestinal derangement in cases of hepatic inertia. This is so often and so intense that we may say the indications of secondary, are as great as those of primary intestinal affection and that if under any circumstances of disease, the intestinal secretions can be so altered as to impart to the stools a dark or black appearance, this should frequently happen in those morbid states of the bowels that are consequent to or concomitant of torpor of the liver. But as experience gives no countenance to this idea, we may safely conclude that the matter which causes dark or black stools comes from the liver.

Nor should we omit to observe that in many instances of such evacuations, we have other indications of an unobstructed state of the liver. For example, if the eyes, skin, etc., have had the coloring principle of bile deposited in them, it is gradually and progressively removed during the passage of such stools. Now, if the yellow color of those organs be owing to the presence of a component of the bile, who can believe that it could be removed by a secretion from the intestines, or if such a thing is possible it must be by the bowels performing vicariously the function of the liver.

Black, consistent and offensive evacuations are regarded by all physicians who have had much experience in the treatment of summer and autumnal complaints in warm lattitudes, as eminently auspicious. Indeed, this is so decidedly the case, that when they occur they are looked upon as almost infallible proof, that all danger has been averted. Now, if the matter which imparts to the evacuations the character under consideration comes directly from the bowels, is it not unaccountably strange that improvement should be decided, rapid and permanent, while an organ so important as

that of the intestinal mucous membrane is pouring out a secretion, not only morbid, but as much unlike that which comes from it, in a state of health, as it is possible to imagine? Now, this is precisely what those allege who maintain that black stools owe their peculiarities to a secretion of the bowels, than which it seems to be impossible to conceive anything more untrue or irrational. Under such operations it is evident, the disease should be hourly exasperated, and no appearance of improvement should be manifested until there is conclusive evidence that the intestinal secretions are resuming their normal character.

It not unfrequently happens that the stools are not only black, but tenacious, glistening and pitchy in character. Such dejections are commonly small in quantity, often not covering a surface larger than a dollar; and they uniformly occur, according to my experience, after the disease has continued some days, and when the symptoms have become typhoid in character. In practical medicine there are no points of more interest and importance to determine, than the source and cause of the dark, tarry or pitchy evacuations of which we are now speaking. Without hesitation we allege, contrary to the received opinion on the subject, that they come from the liver, and that their cause consists in an injudicious perseverance in the use of mercury longer than it is indicated, and longer than any benefit can be derived from it. Into the correctness of these assertions we will now inquire.

'It seems probable,' says Mr. Abernethy, 'that the stools which resemble pitch, are principally composed of diseased secretions from the internal surface of the intestines, since they do not seem either like the residue of the food, or like discharges from the liver.' In relation to the same kind of dejections, Dr. Thompson in his recent work on the 'Diseases of the Liver,' etc., remarks: 'It is now well understood that, in a large proportion of cases at least, this condition of stools is caused, not by bile, but by a morbid secretion or exudation from the internal surface of the alimentary canal, and is consequently to be regarded as primarily a symptom of disease of that surface, rather than of derangement or disease of the biliary organs.'

That the intestinal origin of pitchy evacuations, is an assumption, is rendered probable by the fact, that very often there co-exists with the bowel, affection that are supposed to be adequate

to their production manifest disorder of the liver. By Dr. Thompson, who is so confident they come from the bowels, it is said: 'The liability of such discharges to be mistaken for vitiated bile, must, no doubt, be increased by the fact, that they are particularly liable to occur in diseases of the liver.' Mr. Langstaff remarks, 'I have had frequent opportunity of remarking the morbid sympathy that exists between the liver and large intestines, when the former is diseased or disordered, the mucus glands of the latter secreting a ropy, blackish mucus; sometimes mixed with blood, which is frequently discharged by stool, and induces many persons, who have not had the opportunity of correcting their judgment by the inspection of dead bodies, to suppose that such discharges proceed originally from the liver.'

The stool under consideration is frequently met with in acute summer and autumnal diseases; particularly in the different types of fever and dysentery, and it is looked upon by the southern practitioner, so far as my observation and knowledge extends, as evidence of a morbid state of the liver which requires calomel for its correction. Pitchy stools very early attracted our attention and we soon became satisfied that whatever might be their source, mercury was not the remedy to remove them, and therefore, we were anxious to determine what light *post mortem* investigation would reflect on the subject. In four cases in which these evacuations had been coming from the bowels for from twenty-four hours to four days before death, the peculiar matter of which they consisted was traced, in variable quantity, through the whole track of the bowels into the gall-ducts. We were thus satisfied that the pitchy stools, in regard to which so much difference of opinion exists, have their source in the liver; and this opinion seems to be entertained by a Mr. Marshall, quoted by Dr. Thompson, 'on whose accuracy of observation, we (Thompson) place much reliance,' for he states that he has seen considerable quantities of black pitchy bile passed by stool, seemingly unmixed with any other substance. 'The stools,' he adds, 'had no particular smell, and in every respect resembled the thick, black bile as it is frequently found in the gall-bladder.'

Having now rendered it probable, that pitchy stools come from the liver, let us endeavor to point out the cause of them. In the first place, our attention was soon challenged by the following facts

that they rarely, if ever, made their appearance except in a typhoid condition of the system; that they occurred very generally during a relapse; that they were never removed by mercury, and that some patients recovered to whom mercury was not given for their correction; that in all the cases in which it was persevered in, they were invariably followed, if the patient lived long enough, by bloody dejections—and that this was so uniform a result that we were able, on several occasions, with great confidence, to foretell them.

As we have remarked, such stools happen, very commonly, in typhoid states of the system, or during a relapse which has succeeded to a state of convalescence, when the patient was thought to be out of danger. That they should make their appearance under such circumstances almost exclusively, is a curious and interesting, but not an inexplicable fact. The tendency of mercury is to cause the rapid elimination of the eliments of bile from the portal circulation, and as the superabundant quantity accumulated there is gradually diminished, the stools become less and less dark, and when they are brought down to the point that is compatible with health, the stools resume their normal character. While this is being accomplished, the general condition of the patient progressively and rapidly improves. The temperature of the skin is reduced —the velocity of the circulation is slackened—the secretions are restored—the appetite returns—the strength improves, and, in a word, the patient is considered convalescent. There is still, however, some fur on the tongue—some morbid heat of the skin, and a slight accelleration of pulse. For the purpose of removing these, a box of pills, very commonly those of Dr. Cooke, is left with the patient, of which he is to take from four to a dozen daily, according to circumstances. The physician argues, that as mercurial purging has produced so decided an improvement, there can be no doubt about the propriety of persevering in the practice, until every indication of disease ceases to exist. He does not reflect, and indeed does not seem to know, that when the functions of organic life have been performed in a disordered manner, for some time, that they will not, on the removal of the cause of it, instantaneously become natural. Were he to make this reflection he would not deem it necessary to push purgation farther than is requisite to restore the alvine dejections to a healthy state. This, however, he very rarely does, but quitting his patient under the impression that all

will go right, he sees nothing more of him until after the lapse of a few days, when he is summoned again, and then he finds him in that state which is called *relapsed.*

The heat of skin though increased and pungent is not great—the pulse is accellerated, small and somewhat tense—the tongue coated and dry, or inclined to be so, and the alvine dejections small, consistent, and exhibit a strong resemblance to pitch or tar. This is all ascribed to some indiscretion on the part of the patient, generally to having ate too much. The dejections are believed to indicate, positively, a very morbid state of the biliary apparatus, and as mercury before the relapse was so beneficial in improving the biliary secretion, it is considered as the only article in which reliance should be placed to correct the pitchy dejections. It is, therefore, commonly given in large doses at short intervals. From this practice, however, under such circumstances, no benefit was ever derived: on the contrary, all the symptoms become aggravated and assume more and more the distinct typhoid character, and in a short time the pitchy give place to bloody dejections.

We will here briefly state the order in which, according to our experience, the changes take place that are observed in the course of acute abdominal complaints. The stools having been rendered black, by the use of mercury, they gradually become less and less so until they acquire a rhubarb complexion. The patient is then convalescent. He is still, however, purged, and they become tarry in character, and then bloody.

We have already endeavored to account for the resumption of the natural color by the stools under the use of calomel. This results, as we believe from the elimination of all that portion of effete matter which is incompatible with health. Admit this to be true, and admit that it has been accomplished by mercury, what, we ask, must be the inevitable effect of persevering in that mineral for the purpose of removing the slight febrile excitement of the skin and pulse, as well as the fur on the tongue? To this question we shall endeavor to give an answer which, it is trusted, will prove satisfactory.

We suppose that there is always a portion of refuse matter in the portal circulation that is compatible with health—that in certain diseases it is accumulated in undue quantity, and that when the alvine dejections, under the use of mercury, resume a natural character, all the refuse matter incompatible with health has been

removed. We know that the absorbent vessels possess the faculty of discrimination—that they can distinguish between a natural and an unnatural impression, and, consequently, between proper and improper substances. Though they can and constantly do this in a state of health, it is also true that their tendency to absorb is so great that when those substances which are in relation with their vital properties are not presented to them, the repeated application of those that are not, and which under ordinary circumstances would not be absorbed, will so alter those properties, as to establish a preternatural relation with them, and they will be taken up. Of the truth of this, the animal economy furnishes very numerous illustrations.

If, therefore, after the reduction of the biliary elements to the healthy standard, at which time obvious convalescence commences, the liver is still goaded to extraordinary duty, by a perseverance in the use of mercury, the effect will be that all that portion of effete matter which is compatible with health, will be removed from the portal circulation. If a portion of effete matter is compatible with health, and is necessary to enable the blood to make a proper impression upon the system, at large, and upon the abdominal viscera in particular, it is perfectly evident that the elimination of that portion of it, in the form of bile, will cause the blood to make an injurious impression. Then the blood becomes a cause of irritation, and we shall have, speedily developed that train of symptoms, which is denominated typhoid.

When the portal blood has been nearly or completely deprived of the elements of bile, the vital properties of the biliary canals, like other absorbent vessels, will, particularly, when kept under the influence of mercury, be brought in relation with the fluid contained in the vena portæ. It must be observed, however, that as it is not the material out of which bile is made, it will be impossible for the elaborative energies of the biliary ducts to convert it into that secretion. An attempt, however, to that effect will be made and the fluid absorbed from the venæ portarum will be converted into the peculiar matter of which pitchy or tarry stools consist. This matter although it comes from the liver, is not bile, for those dejections that are rendered black by a concentrated biliary secretion, become yellow or greenish when diluted with water, while this never happened in the experiments we made with the dejections under consideration.

If pitchy stools are produced in the way we have intimated, and result from the indiscreet use of calomel, that they should be superseded by bloody evacuations, should never excite surprise or constitute an occurrence difficult of explanation. In the state of the system now contemplated, it is evident there is a great and dangerous reduction of vital energy, and as the elaborative power of the biliary canals is exerted upon a fluid to which it is not accustomed and which it cannot convert into bile, it is certain that it must become more and more enfeebled—that it will produce less and less change on the fluid absorbed from the vena portæ, until, at last, it will be extinguished, and the blood will pass through the biliary canals unaltered.

Now we assert, as the result, of repeated observation, that pitchy stools will be, to a certainty, succeeded by bloody evacuations, if the use of mercury is persevered in and the patient should live a few days. This result is so sure to follow, under the above circumstances, that we have predicted it with great confidence. Numerous cases might be appealed to in proof and illustration of what has been alleged, but we will rest satisfied, for the present, with a single one, inasmuch as it was very striking in its character, and occurred in the presence of a physician.

In the autumn of 1828, we were requested to visit Dr. Richardson, who resided in Moulton, Alabama. When we arrived he was and had been for nearly two days, passing pitchy dejections —his pulse was rapid and small—skin dry and hot—tongue furred and dry—intellect clear. We immediately asked if he had not been regarded, some days previously, out of danger, and received an affirmative response. During the time he was supposed to be convalescing, he took daily, more or less, of Dr. Cooke's pills. We then endeavored to convince him that his relapse was owing to the improper use of mercury, but, in this, we were wholly unsuccessful. Completely under the influence of venacavaism he could not be persuaded that the pitchy dejections, which he frequently passed were not a morbid biliary secretion which calomel could correct. Two other highly respectable physicians united with me, in this view of the subject, but so unaccountable was his infatuation that he appeared determined to perish a martyr to his principles. Finding my advice unavailing, I then informed him that the pitchy stools would be superseded, in the course of twenty-four or forty-

eight hours by bloody evacuations under which he would certainly sink in despite of all that could be done for him.

I left him at 3 o'clock p. m. and in about twelve hours he began to pass blood from his bowels, and in twenty four more he expired.

That the bloody evacuations that succeed pitchy stools, do really come from the liver, there can be no lack of opportunity to verify, as such cases, according to my experience, almost invariably prove fatal. We have repeatedly traced the dark grumous blood through the whole track of the bowels into the bile ducts. This is proof positive that it passes through the biliary canals unaltered, an opinion which seems to be entertained by a very recent author. Dr. Thompson in his work on '*Diseases of the liver*,' *etc.*, thus writes: 'As to any change in the condition of the *secretory apparatus* of the liver, which can be supposed capable of modifying the amount or character of the biliary secretion, the only notions of such changes which we are able to form, rest on the idea of secretion being more or less a process of filtration. Under certain circumstances, we find that the blood passes through the secretory apparatus, little if at all changed; and this so far favours the idea that there may be various modifications, of the state of that apparatus, in which the amount of filtration, to which the blood is subjected in passing through it, will vary; and that, from these modifications, consequently, may result variations in the physical and chemical qualities of the bile.'

Now, if it be true, as we aver, that the stools will resume their natural character under the judicous use of mercury—that then the biliary secretion is rectified—and that if it is pushed farther, it will bring down pitchy and, ultimately, bloody evacuations, have we not ascertained a rule of practice by which the physician may be safely guided in the employment of that important mineral, and have we not developed the cause why it often appears to be inefficacious in correcting biliary derangement, and how also, when injudiciously used, it produces the most disasterous consequences? These points we may not have determined to the satisfaction of all, but we have acted on the principle which we have attempted to illustrate and explain, for many years, and we have not had, in a single instance, reason to think it unsafe or untrue. In the treatment of the acute abdominal affections which occur during summer and autumn, there are certain obvious indications, and amongst these,

the rectification of biliary disorder, we have always considered the most important, and to fulfil it we have invariably relied upon mercury, and generally calomel. This we have steadily persevered in until our object was accomplished, and no longer. Then it was relinquished, and we have never had reason to believe that it was discontinued too soon, nor have we ever been under the unpleasant necessity of witnessing, what we regard as the effects of its improper use.

A very large and respectable proportion of the profession have the utmost confidence in mercury, and they recognize the fact as true, that as fever declines, it should be given in smaller doses and at longer intervals. Nothing, however, more specific has been offered on the subject—no satisfactory reason has been given for the gradual but progressive diminution in the amount of it that should be used, which all seem to consider so important. This, we trust, will be found by the observing physician, to consist in the restoration of the natural character to the dejections, and when this has happened he will be deterred from a further perseverance in the use of mercury, by the just apprehension that pitchy and bloody dejections, which, generally, terminate in death, may be produced, and when they do occur, he will no longer, as we have seen in very many instances, attempt to correct them by the use of any preparation of mercury.

(TO BE OCNTINUED.)

PRACTICAL HINTS ON "THE STATE OF THE SYSTEM."

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Among the most deeply rooted impressions of my early pupilage, were those imbibed from the teachings of the most eloquent Professor of that period, on the *State of the System.* This phraseology, although conveying to my own mind, an epitome of all that is valuable in the science of Medicine, has been two often mystified in later times, and in many cases, has been wholly misunderstood. I am well aware, that not a few who have been prone to denounce the teacher referred to, even in reference to the special matter now

before us, have not been slow to award the meed of praise to Armstrong, Stokes and Graves, for their practical illustrations of the very same great principles. This, however, is so perfectly accordant with the perverseness of human nature, that it would argue an ignorance of men and things, too palpable and mortifying, to warrant us in a further exposure of the inconsistency. Let it suffice to say, that neither of the distinguished foreigners whose names we have quoted, nor any others have advanced a single principle, calculated to subserve the true interests of practical medicine, that was not ably inculcated from thirty to forty years ago, by the illustrious American, whose lessons on the momentous importance of scrupulously watching the State of the system, are yet fresh in the recollections of many who had the honor to be numbered among his pupils. It was this cardinal, this vital doctrine that developed the lamentable insufficiency of all methods of practice, based on nosological systems, and pointed the honest inquirer to the true source, the very fountain head of all sound medical philosophy.

And what mean we by the *State of the System?* Is it a mere string of words, short though it be, without force or interest? Far otherwise, as the sequel will make manifest. And while we claim as much as we honestly do for the great American teacher, we are far from denying that masses of valuable facts have been added to the great stock since his day, and that in this sense, especially, the science may be said to have made steady advances. But in regard to what are called "new developements," the noted speculations and theories, styled by some, "very important doctrines," we have to be convinced, even at this day, that the profession has gained much, in the last quarter of a century.

But, what is to be understood by the *State of the System*, as it bears on the practice of medicine? we reply, much every way, and especially, as being the *only solid foundation of a rational and successful treatment of Disease.*

If a mere recognition of symptoms and signs as detailed in books, and a knowledge of the properties and ordinary doses of medicine; and the usual effects of other available expedients, constituted all that was needful to make a good practitioner, then the task of the physician were indeed, comparatively easy. We know, that thousands predicate all their operations of a remedial charac-

ter, on these items, almost exclusively; and we know too, that they often succeed. But if mere success were a valid argument, the veriest charlatan in the world, would not be destitute of evidence to justify his claims and pretensions.

The practice of medicine, after a rational, comprehensive, natural method, is something very different, however, or we mistake the high bearing and lofty aspirations of our profession. In our attempts to rectify the errors of the human system, whether they be physical or mental, we have a world to explore; not once only but every day, and with the deep wrought consciousness, that mutation is a daily and hourly attribute of all that appertains to the subject of our investigation. That there are, now and then, cases of disease, so stereotyped and fixed, as to present very little variation, calling for scrupulous observation, from day to day, is conceded. But in reference to the great mass of disease that flesh is heir to, our remarks are fairly applicable in all their force.

To know the State of the system, therefore, in the progress of disease, is to make ourselves familiar with every alteration that can be detected by human ingenuity, in the various functions, in all the organs, to understand and appreciate the relative power of remedial agents, under varying circumstances, and to bear in mind perpetually, the influence of all external things, and especially the mutable nature of climate, weather and the like. In other words, the philosophic physician should make it his chief business to have a birds eye view of the entire man, and of all the influences likely to bear upon and modify his peculiar condition. To attempt this, is to endeavor to ascertain the *state of the system*; and the nearer we approximate to this desideratum, the greater is the probability of our success.

The *great* evil in our profession, the rock on which many have made a sad wreck, is *hobbyism*. Thus, in place of taking a view of the whole, they have magnified, as with the most powerful microscope, some insulated point, in the vast field of research. As an example and illustration, we name *the pulse*, fully appreciating, however, as we think, its relative importance. Yet, the time has been, when the pulse was regarded as an infallible guide in the management of disease; and just as this indication made its impress on the mind of the prescriber, was the course supposed to be requisite in the given case. And although the inferences deduced from this datum were often justified by the final issue, truth

compels us to say, that the infatuation of mere theory has often converted the lancet into an instrument of death.

The mania for *purgation* may be cited as another item, that has relevancy here. Not a few practitioners, (and we freely concede that some of them were highly gifted men,) have imagined the alimentary canal, a congested state of the vena cava, and various other portions of the human economy in apparent derangement, to owe their morbid condition to a state of things, manageable *only*, by oft repeated and active cathartics. Under the influence of such views, the remedy has been pushed so far, in many instances, as to lay the foundation of real disease, where none perhaps had previously existed. Most certainly, we can trace the long protracted fevers of this country, to a lamentable extent, to a sheer devotion to the use of purgatives, as the alpha and omega of practice. That we would presume to control ordinary fevers, irrespective of cathartic medicine, none will think who have listened to our repeated advocacy of this department of Materia Medica, in its proper place. We object not to purgatives, as a *part* of remedial treatment; while, as the *totality*, we utterly repudiate them. The man who places his reliance on them, only, or mainly, may study with care the condition of the alimentary canal; but he does so, to the great neglect of other parts of the economy, the accurate study of which, as points to indicate diseased action, is essential to a proper knowledge of the *state of the system.*

There are those too, who lay too much stress on the potency of *emetics*, in the cure of disease. They base the value of this class of remedies, very much, on the conceded doctrine, that the stomach is the centre of sympathy, both healthful and morbid, and that if the centre be rectified, the most remote spot in the circumference, will share in the salutary influence. We have too often witnessed happy effects from the action of emetics, to call their worth in question; and if we seem to undervalue them, it is only because we desire to divert the attention of physicians from the stomach, as the only source of morbid action, and to induce them to take a general survey of the whole system, and adapt their remedies accordingly.

It were easy to adduce, as fit illustrations of my main position, all the departments of materia medica; for each in turn, has been the subject of *exclusive* devotion, to the serious detriment of medi-

cal science. I cannot forbear, however, to notice the fatal operation of *exclusivism*, or of a neglect to study the state of the system, as it is often evinced by practitioners, who permit their patients to die for want of *tonics*, under the impression, that "the time for tonics has not yet come." A patient has been laboring for weeks under an ordinary autumnal fever, that by judicious treatment, should have been arrested in as many days. Are there any remissions or intermissions in the case? Oh yes; "but then the bile has not been sufficiently purged out; the man wants more cathartics." Thus, the very time provided by nature for the judicious use of tonics, is wasted in the needless and pernicious administration of medicines to *purge out the bile*, and the patient is literally purged to death. So many cases of this kind have fallen under my own observation, that I cannot mistake in the premises. The evil is so prominent in medical practice, that I am sure hundreds will be ready to verify the statement here made. Again: It was a doctrine taught before the present race of doctors came into existence, that the *cutaneous surface*, is one of vast importance in the management of disease. And yet, if we analyse the practice of very many of our profession, the result will prove, either a total ignorance, or a culpable neglect of this position. In the days of *Sydenham*, *Huxham* and *Pringle*, (men who wrote and practiced very differently from many of their successors) a long continued disease, or one that resisted ordinary internal remedies, was almost uniformly put under the influence of vesicants or rubefacients. In other words, it was fashionable, in olden time, to regard the skin, as holding a prominent place in therapeutic administration. And although long before the efforts of Dr. Rush, to show that there was a *proper* time for the use of *blisters* and kindred remedies, the same doctrine had been hinted at by distinguished practitioners, we find a teacher and an author too, of modern times, denouncing the idea of a *blistering point*, as "a fallacy that died with its author," nevertheless, there lives not a practitioner, of ordinary sagacity and observation, who has not witnessed the failure of spanish flies, of the very best quality, to induce vesication. I once heard a practitioner, (afterwards a Professor, but since deceased) denounce a village apothecary for imposing on his customers, a worthless article, in the shape of a blister plaster; while the true cause of failure was the ignorance of the physician, or his in-

attention to the *actual state of the system.* He allowed the plaster to be applied at a time, when it was impossible for flies to vesicate. I speak advisedly in this matter; for two physicians, residents of the village, had repeatedly obtained blister plasters from the same apothecary, made of the same flies, and employed with complete success, the writer of this article having been one of the physicians referred to.

If febrile excitement be inordinately high, or so great as to call for venæ section and other active depleting remedies, it would be folly to apply a blister until such remedies had been resorted to. It might augment the existing excitement and so do positive harm, but it could not vesicate. Or, if the system be prostrated, and the pulse scarcely perceptible, as is often the case in low fevers, a blister applied to the extremities will fail to produce its effects. It will not act at all, or it will induce gangrene, and in either event, the inference must be, that the remedy was applied out of season.

There can be little doubt, that the repeated failure to get any action from a blister; or the frequency of baleful effects from the application of vesicants, growing out of inattention to the *state of the system*, has led to the very general disuse of this class of remedies, in various sections of the country. Hundreds of cases of bowel disease, such as Diarrhœa and Dysentery, for the cure of which internal cathartics and astringents are often prescribed to no good purpose, might be speedily relieved and promptly cured, by the application of blisters to the extremities, after a mild course of internal medication, and the subsequent exhibition of proper remedies through the denuded surface. I have known patients laboring under a slight fever, with some derangement of the primæ viæ, to be harrassed day after day with drastic cathartics, and not a solitary appliance of a tonic or nutritive character, during the remissions or intermissions, nor a single effort to divert morbid action from the internal organs, to the surface. To some of those cases I have been called in consultation; and finding the pulse feeble, the alimentary canal in an irritable state from the previous treatment, and nothing to forbid the use of blisters, I have directed them to the wrists or ancles, or both, with the happiest effects on the whole economy; and through the denuded surfaces, the sulphate of quinine and sulphate of morphia, if needful, have been introduced, most beneficially and successfully.

There are those who deem their attainments quite respectable, if they can designate the ordinary symptoms of a given disease, and the doses of remedies supposed to be proper; and this kind of knowledge is, doubtless, not to be despised. Yet it is very insufficient for the faithful discharge of professional duty. To know the properties and common doses of all remedies, is well; but it is infinitely better, to acquire the art of varying doses and remedies to meet contingencies, and of giving medicines just when they should be given, and of witholding them, when the circumstances call for such a course. It is very questionable, whether, upon the whole, more evil has not grown out of the abuse of remedies, than could have followed their entire disuse. The mania for *doing*, when the system demands repose, has sent thousands to untimely graves; and yet the unwary friends and relatives have been quite satisfied, because "the Doctor has been so attentive and has tried every expedient suited to the case."

These remarks constitute an every day commentary on the importance of studying the state of the system, as the true key to all useful knowledge, touching the management of disease. To those who neglect this study, or whose habits or predilections unfit them for it, there is no meaning in that admirable aphorism, *nulla medicina, aliquando, optima medicina.* To understand it as Sydenham and his cotemporaries regarded it, calls for patient and perpetual vigilance to ascertain the mutations of disease; or in other words, to become familiar with the varying state of the system. The *ultima thule* of medical sagacity finds its point and power, in in the tact that judiciously arrests the further administration of medicine, and puts nature upon the exercise of its recuperative energies. In cases, without number, it is the highest mark of wisdom to abstain from remedial appliances, and trust the system to the soothing influence of repose and the mild agency of a well regulated diet. And yet, this language, and these precepts are less intelligible than Greek or Syriac, to him who is incapable of appreciating the vast importance of the basis of our hints.

Does any one yet deny this doctrine of the *State of the System*, as being vitally important in the treatment of disease? Let such an one tell me, why it is, that a man, who a year ago swallowed two ounces of laudanum with comparative impunity, is destroyed to day, by less than one ounce. Or, why the Turk who was fa-

miliarly called the *Corrosive Sublimate Eater*, could take 60 grains of that poison at once, and yet be unhurt, while another Turk would be killed with ten grains or less. Or, how it is, that ounces of laudanum will fail to make an impression on a patient laboring under Delirium Tremens, or Tetanus, who, in health, would be fully narcotised with two drachms? Or, why a child, suffering under Croup, will not be vomited by any amount of Ipecacuanha or Tartar Emetic that can be administered, if not previously subjected to general or local bleeding? Ten thousand facts lie scattered throughout medical works, unheeded because unread, or misunderstood, proving incontestibly, that the wind whose perpetual changes are marked by the ever moving vane, is not more variable, than is the state or condition of the human system. And in the face of all these facts, there are scores of practitioners, whose remedial management of diseases of every character and grade, is as truly sterotyped, as if the human system were subject to no changes, but invested with landmarks graven as with the pen of a diamond.

If any inquire, how the state of the system may be ascertained, with tolerable certainty, the writer would venture a negative reply, somewhat after the following mode. *Not* by a diligent examination of the pulse; *not* by an inspection of the stools or urine; *not* by noticing the condition of the skin, the countenance, the eyes, the tongue; *not* by attending to the stomach or bowels, or head, or feet; *not* by the use of the stethescope, percussion and the like; *not* by watching the idiosyncrasies or peculiarities, hereditary or otherwise of the patient; *not* by learning accurately his previous habits, or his present notions, vagaries and fancies. "What," says the inquirer, "will not these suffice to give a pretty correct view of the state of the system?" I respond, that while no *single* source of information can be relied upon, we may attain the object, by a careful combination of the evidence afforded by *all* the sources, and in no other way. Be it remembered, moreover, that the condition of these sources is the subject of perpetual fluctuation, and that in the treatment of disease, this constant mutation lays the foundation of incessant watchfulness on the part of him, who would become acquainted with the State of the System, in any or all of his patients, as the groundwork of a sound and salutary code of therapeutics.

From the few remarks, thus cursorily advanced, the following inferences are fairly deducible, viz. 1st. A man may excel the Bells, the Hunters and Wisters, in Anatomical knowedge, and yet be defective as a practitioner of medicine. 2d. The most accurate and extensive acquaintance with physiology, and the most thorough knowledge of the powers of remedial agents, aided by the widest range in the mysteries of animal chemistry, will not adequately fit a man for the discharge of the duties of a physician. All that is embraced in these varied attainments should be sought after and possessed, if practicable, by every medical man. Yet, he needs more than all this. He must have a talent for observation and a disposition to put it in constant exercise, or he cannot rise to the dignity and success of an intelligent, rational and reflecting practitioner of the healing art.

Who can fail to perceive, that the all important study of the state of the system, as it is developed and varied under the influence of disease, demands a peculiar turn of mind, or bent of inclination on the part of him who would gain this desideratum. Books cannot impart it; professors cannot, private preceptors cannot. The work devolves on each individual for himself; just as responsibility for the management of patients, is to rest on each. Let every young man, as soon as he starts in professional life, resolve to scrutinize and note down every change in his patients, be it great or small, in any respect that is calculated to affect the case. Let him pursue this course faithfully, for a few years, in reference to season, weather, the action of remedies and their failure to act; and the day will not be distant, when he will agree with us, in the important axiom, *that a knowledge of the State of the System, is the only solid, and rational basis of sound medical treatment.*

THOUGHTS ON IDIOPATHIC TETANUS.

BY DR. W. M'NELLY, OF LINCOLN COUNTY, TENN.

TETANUS is fortunately a disease of rare occurrence, for it is so difficult to control, that were it as common as Asiatic Cholera or Variola, it would be much less under the command of the physician.

Although this disease was familiar to the faculty long before the time of Galen, much difference of opinion still exists in regard to its nature, and perhaps, its treatment is more unsettled than that of any complaint, that has for so great a length of time challenged the attention of those whose business it is to relieve human suffering, and to prolong human life. So discrepant in truth, is the character of the remedies recommended on the authority of partial and individual experience, that the young practitioner is wholly at a loss on what to rely, and, consequently, the means which he exhibits gives him no other guarantee of success than rational conjecture.

We are told that the forcible contraction of the muscles characteristic of Tetanus results from inflammation of the spinal cord, and its enveloping membranes. This is doubtless true in relation to that variety of tetanus which has been denominated traumatic; hence the policy of blood-letting, both general and local, and free purgation cannot be questioned. Is it, however, absolutely certain that that form of tetanus called idiopathic is dependent upon the same lesion of the spinal cord? I do not believe that it is. Its cause most generally consists in violent atmospheric vicissitudes, and we know that when prejudicial impressions are made on the system, and they are sufficiently intense to cause morbid action, the weakest organ is sure to be the chief, if not the only sufferer. Now what is the nature of the morbific impression which must result from a sudden and violent transition from heat to cold, or vice versa? If from heat to cold the vital energies are enfeebled and reduced below the natural standard, and to a greater extent in the weakened organ than in any other part. It is a law of the animal economy that reactional excitement will be in proportion to the previous depression. This may easily go so far as to produce determination to, and consequently irritation of a part; and if the

depressing impression be repeated, as the organ will become from each successive attach weaker and weaker, this result must sooner or later follow. That the irritation which must often happen from sudden atmospheric transitions may be readily caused to pass into actual inflammation, is proved by what we see in diarrhœa, which generally depends upon undue determination of blood to the mucous membrane of the bowels, and, therefore, irritation, but which may be converted into inflammation, by the use of improper ingesta of any kind, whether medicinal or alimentary. Nothing of this kind, however, will happen, if proper precautions be taken to remove the irritation.

Now it appears to me altogether probable that as diarrhœa evidently depends on irritation, which may readily pass into inflammation, the variety of tetanus under consideration, recognizes a similar state of the spinal cord, as its proximate cause, and that if the proper treatment be adopted at an early period, that train of alarming symptoms which marks the progress of tetanus will not follow.

There is another reason why I dissent from the opinion that ascribes idiopathic tetanus to inflammation of the spinal cord, and which is the condition of the circulation. Early in the disease the pulse experiences no manifest alteration either in fullness, frequency or tension. During the paroxysms there is observed slight irregularity, but it nearly or quite disappears during the intervals; and indeed in some cases several days elapse before any decided alteration takes place in the pulse. Irritation should, I suppose, be sufficient to explain the change that takes place early in the disease, for after a time, when there is reason to think it has passed into inflammation, the pulse becomes full, hard and frequent.—While, therefore, if traumatic tetanus depends on inflammation, and requires active antiphlogistics and idiopathic on irritation, the indication would appear to be to obtund by narcotics nervous impressibility. Before, however, they are used, if there should be reason to suspect any cause of irritation in the stomach and bowels, they should be cleared out by an emetico-cathartic. Premising such means will render the action of narcotics more speedy, certain and effectual. In common with others, I prefer Laudanum to any other article belonging to the class, or even to solid opium itself. It should be given frequently and freely; from 80 to 100

drops every hour, increasing each successive dose 20 or 30 drops, until the spasms are subdued, is the manner in which I have successfully used it.

We find in idiopathic tetanus much torpor of the skin, the action of that organ being generally suspended suddenly. The strong sympathetic connection subsisting between the skin and liver, causes the latter to fall into an inert state also. To restore cuticular and hepatic action, I give Dover's Powder and Calomel, and I persevere in their use until my object is accomplished; for until then, there is always considerable danger of a relapse. Should the pulse become full and hard, the lancet should be pushed with decision—then I take it for granted there is inflammation of the spinal cord, and the loss of blood indispensable. The above is the practice upon which I have relied, and with a success quite satisfactory. Cases might be adduced in illustration of what has been said, but as cases of idiopathic tetanus are very similar in character, they would answer no other purpose than to lengthen this article, which, I trust, is already sufficiently full and explicit.

BIBLIOGRAPHICAL NOTICES.

Pharmacopœia of the United States of America. By authority of the National Medical Convention, held at Washington, A. D. 1840. *Philadelphia: Grigg & Elliot.* 1842—*pp.* 279.

We find that to the Pharmacopœia just published, there has been prefixed a brief historical sketch, from which the reader will learn that the Pharmacopœia of the United States, was first published near the close of the year 1820, under the authority of a National Medical Convention, which met in the city of Washington on the first day the preceding January. It was then determined that a second Convention should meet at the same place, in the year 1830, for the purpose of revising the Pharmacopœia of 1820. The plan of a decennial revision, which originated with the first convention, has been, and is to be continued and followed out, as

it doubtless should and will be, and thus the physicians of the United States, will always have a work for reference, of the highest authority, and which, therefore, should be cheerfully encouraged.

Although the Pharmacopœia of 1840, is by the authority of the National Medical Convention, its revision and publication were confided to a committee, and it is to be regarded as the result, more particularly, of their labors. The committee consisted of George B. Wood, M. D., Franklin Bache, M. D., and Robley Dunglison, M. D., of Philadelphia; Joshua J. Cohen, M. D., of Baltimore; Theophilus C. Dunn, M. D., of Newport, R. I.; Wm. Bacon Stevens, M. D., of Savannah; and Thomas Sewall, M. D., of Washington.

In pursuance of the objects of their appointment, the committee of revision and publication, met in Philadelphia on the 10th of February, 1840—present, Drs. Wood, Bache and Dunglison, of Philadelphia, and Dr. Cohen of Baltimore; but as the last named gentleman was unable to remain in Philadelphia, and participate in the proceedings of the committee, the whole labour of revision and publication devolved on the first named three, and they have performed the arduous task assigned them, in a manner which not only does not reproach the high rank they deservedly enjoy, but which entitles them to the gratitude of the profession.

The Pharmacopœia of 1840, will be found, when compared with those that preceded it, to contain very numerous and valuable additions and alterations. Indeed, this is so decidedly the case, that it was found impossible to incorporate them with that of 1830, and therefore, the committee were under the necessity of entirely re-writing it, so that in its present form, it should be respected as a standard of great value, which the physician should make it his business to procure as speedily as possible. To accuracy in the preparation and success in the prescription of his remedies, he will find the work before us indispensable.

An investigation of the present unsatisfactory and defective State of Vaccination, and the several Expedients proposed for removing the now-acknowledged Defects of the Jennerian Practice. By Thomas Brown. 1842.

This pamphlet, as we learn from the following review of it, taken from the *London Medical Gazette*, has attracted much attention

and has awakened quite a sensation in England, in regard to the important topics which it has, in a spirited, if not in an able and satisfactory manner, discussed. The points in dispute have been raised in the United States, and particularly throughout that portion of it in which our readers principally reside, and as they are often called on to answer questions—refute arguments, and remove prejudices which are started in relation to the efficacy of vaccination, as a preventive of small pox, we confidently trust that they will not only excuse, but thank us for giving them the following article *in extenso*. After its careful perusal they will be the better able to estimate the value and philanthropy of the efforts that have been made to shake confidence in, and to circumscribe the diffusion of vaccination.—*Ed. Recorder.*

The great, and indeed we may say the sole, defect of vaccination in the eyes of Mr. Brown is, that the security afforded by it is imperfect and temporary. To be worth any thing, according to Mr. Brown, the preservative power must be absolute and permanent. He will admit of no compromise. *Aut Cæsar aut nullus* is his maxim. Convict vaccination of failing in certain cases to afford this absolute and permanent security, and forthwith it should be abandoned. Mr. Brown enters into some details concerning the proportion of the vaccinated who, in after life, yield to the small-pox contagion, and he comes to the conclusion (p. 73) that 'above one-half of the vaccinated cases have already so yielded.' He then adds, 'when we consider that vaccination has not yet been proved by above one-half of the period of human life, it does not seem asserting to much too say, that unless some expedient can be contrived to render the anti-variolus powers more complete, the whole, or nearly so, of the vaccinated cases may suffer an attack of small-pox, and this not of the safest and mildest, but of the most severe and fatal nature.'

This, to be sure, is a sad picture of vaccine defalcation, and if it were a faithful picture, we suspect that the eloquence of Mr. Brown would not have been needed to uproot the practice of vaccination. The common sense of mankind would have taught them the futility of the Jennerian practice, which under such circumstances, would either have silently languished, or been authoritatively put down. The force of this argument is wholly lost upon Mr Brown. He acknowledges, with some surprise to be sure (page 72), that the withdrawal of public confidence in vaccination 'has been delayed longer than he expected,' but he does not, or will not, see that this very delay should have suggested doubts as to the correctness of his data. Ample time has been given. Forty-four years have elapsed since the discovery of vaccination.—Forty years after its general adoption in this country, the united voice of the empire, in Parliament assembled, declared itself so perfectly satisfied with the amount of the security that vaccination gives, that the inoculation of small-pox was declared illegal, the practice of vacci-

nation throughout England and Ireland was placed under the direct control of the Government, and a tax levied for its support and encouragement. One would have imagined that this must have opened the eyes of the most bigoted. No! Mr. Brown declares the Vaccination Extension Bill of 1840 to be a disgrace to the profession in all its features.' He still adheres to his early impressions. Vaccination is not what it was first represented to be—a complete, certain, uniform, unvarying, permanent security against small-pox. It has not banished small-pox from among us, as we were fondly told it would undoubtedly do; therefore *delenda est Carthago*:—Vaccination must be abolished, and inoculation again encouraged.

Mr. Brown's error consists in his fixed determination to view only one side of the picture. He is an advocate pleading in the cause, 'Inoculation *versus* Vaccination'—a prophet anxious to make good his own predictions, but he is no judge balancing nicely the arguments *pro* and *con.*, and arriving at length at a carefully drawn and practical conclusion.

That the merits of vaccination were largely overrated at the outset of its career, by Jenner and his followers, must be admitted. They undertook to prognosticate what would be the effects of vaccination under every possible contingency of age, time, climate, and constitution. They boldly announced its power of banishing small-pox from the earth, before it had ever reached tropical countries, and ere a single black child had been vaccinated. They spoke of absolute and permanent security extending through the whole period of man's life, before vaccination had been known two years. This confidence of tone and manner had a wonderful influence on the early history of vaccination. It gave a powerful stimulus to the exertions of its friends and supporters, and materially assisted in fostering that rapid growth in public esteem, which is the great feature distinguishing vaccination from inoculation. How far its career would have been affected by a more cautious and philosophical announcement of probable results is a mere matter of conjecture. We apprehend that, in such a case, its early progress in public favor would have been much slower; but still, like inoculation it would have advanced steadily, until, at the present period, the actual condition of the world with reference to vaccination would have been much as we actually find it.

That absolute and permanent security, for the possession of which the early vaccinators so loudly vaunted vaccination, and for the want of which Mr. Brown now as loudly accuses it, is not expected by the world at large. One swallow does not make a summer; neither do one two, nor three hundred cases of small-pox succeeding to vaccination withdraw from the public mind its confidence in vaccination, provided that one, two, or more thousand remain secure, and the total amount of deaths and injury to eye and constitution inflicted by small-pox falls short of what it did in the days of our fathers. We recommend to Mr. Brown the study of statistics. The cleverest reasoning fades before the dispassionate results of figures in long columns. Small-pox exists, but it exists shorn of many of its worst features; and when it

does invade the vaccinated, it is no longer the direful disease which our ancestors knew, and so justly dreaded.

While we thus blame Mr. Brown for the one-sided picture of vaccination which he gives, we do not on the other conceal from ourselves the injury done to a good cause by persisting in those confident announcements of the complete and permanent security afforded by it, which we still occasionally meet with in high quarters. It is quite idle at this time of day to indulge in such vain boastings. Small-pox occurring after vaccination has its pathological characters as clearly defined as small-pox in the unprotected. We hope, therefore, that in future it will not be thought necessary for the upholding of vaccination to overestimate its merit, or to overlook its defects.

At page 4 he tells us, 'that if variolous inoculation had been made imperative upon the whole population, not only would the present dilemma have been avoided, but the only probable and possible way of resisting the ravages, and even extinguishing the existence of contagious small pox, would have been the result.' Small-pox extinguished by inoculation! As the sentence stands it is absolute nonsense. Perhaps the author meant to say that inoculation universally practised would have banished epidemic visitations of small pox. If so, he took a strange way of enunciating his proposition. But how this principle of universal and imperative inoculation could have been carried out puzzles us, for we learn, at page 60, that if inoculation is performed on the young, enfeebled, and exhausted, the disease will be uniformly either severe, dangerous or fatal.'

Mr. Brown's practical hints concerning inoculation, and still more concerning vaccination, are too singular to be passed over in silence. He says, that while all measures are to be pursued calculated to render variolous inoculation mild, 'the opposite plan should be adopted in regard to vaccination, and every means used to make the phenomena of the vaccinated spot as severe as possible.' And how do our readers suppose that this is to be effected? To secure this most important object, says Mr. Brown (at p. 61), the virus should be allowed to become a little dried or viscid upon the lancet before it is inserted in the arm! Besides which, the vaccinated spot should be kept hot, and a slight irritation excited by temporary pressure! Such is Mr. Brown's mode of improving the practice of vaccination.

Mr. Brown propounds, at page 53, the strange notion, 'that cases of small-pox succeeding vaccination have been in general confined to the lower classes of society.' We feel satisfied that this is a complete error. The upper classes have always had their fair share of the defects as well as the benefits of vaccination. We notice this error of Mr. Brown's the more willingly, because he coupled it with a recommendation in which we perfectly coincide. 'Nothing can be a greater error,' says he, 'than the taking vaccinated children under ten years of age away from an epidemic small-pox, for if they are to have it, they would then receive the contagion while the influence of the previous vaccination over the constitution is yet capable of mitigating the disease; whereas, later in life, when engaged in all the duties of social life, they may be attacked with small pox, when the influence of the vaccine is

either diminished or exhausted.' The good sense of these few lines will atone for much of the accompanying absurdity.

Mr. Brown takes up in succession the several modes which have been proposed for improving the practice of vaccination, and fortify the public mind in its behalf. It is hardly necessary to say that he finds fault with all of them. He begins with revaccination; but having made up his mind that primary vaccination, with its more decided results, affords only a partial, feeble, uncertain, and temporary security, it is hardly to be wondered at that revaccination, with its imperfect phenomena, should be declared 'unworthy the confidence of any reasonable being.' He proceeds to the consideration of retro-vaccination, or the method of increasing the intensity of the vaccine virus by passing it again through the body of the cow. This, in the onset, without any inquiry into the facts, Mr. Brown at once sets down 'as the most unsatisfactory, unphilosophical, and unworthy expedient that could possibly be contrived, carrying inconsistency and contradiction on its very face. He has no hesitation in declaring, without laying claim to any experience in such an expedient, that it is only sporting with the good sense and safety of the public, and will be found a ridiculous source of further confidence.' These are hard words, but they are nothing more. M. Bousquet has a beautiful series of drawings, showing the difference in the progress of the long-humanized vaccine virus, and the same virus improved in its activity by the process of retro-vaccination. The results are very striking, and no one, who has enjoyed the advantages of study at the Ecole de Médecine, but must be sensible of the remarkable power which this expedient possesses. All this, however, goes for nothing with Mr. Brown.

It fares no better with Mr. Creely and the new variolo-vaccine virus; or rather, we ought to say, Mr. Brown is more inveterate against Mr. Creely than even against Dr. Jenner. His experiments on the inoculation of cows with the matter of human variola, are declared to be unpleasant and disgusting, because he made use of the mucous membrane of the vulva, instead of the cellular membrane of the mamma! Mr. Brown, however, in this part of the argument, impales himself on the horns of a dreadful dilemma. He declares that the variolo-vaccine, or the virus obtained by inoculating the cow with small-pox, can be none other than small-pox. Yet in the same breath he inveighs against the use of this very matter, and counsels a return to the practice of inoculation!

MONHTLY PERISCOPE.

Consumption.—Little can be done towards the cure, but much towards the prevention of consumption. We, therefore, to facilitate the attainment of the latter object, recommend the following remarks, of Sir JAMES CLARKE, to the attention of our readers. The principles he enforces are those which have for years guided us, and in following them we have had much reason to believe we have been of considerable service to those of infirm or defective constitutions:—*Ed. Recorder.*

"In childhood, the earlier the causes of tuberculous cachexia are applied, the more speedily will it be induced If, for example, an infant, born in perfect health and of the healthiest parents, be insufficiently or injudiciously fed, that is, be nursed by a woman whose milk is inadequate in quantity or quality to afford proper nourishment; (it may be too rich and too exciting, or it may not be sufficiently nutritious;)—or if the child be fed on other food ill-suited to the digestive organs, or be confined to rooms in which free ventilation and cleanliness are neglected, a few months will often suffice to induce tuberculous cachexia. The countenance will become pale, the flesh soft, the limbs emaciated, the abdomen tumid, the evacuations fetid and unnatural. The external lymphatic glands, especially those of the neck, will enlarge, and the child will speedily fall a victim to tuberculous disease, while its brothers and sisters, who have been properly suckled and reared with care, attain a healthy maturity. If this is the case in a strong infant, the offspring of healthy parents, and perfectly healthy at its birth, how much more certainly and rapidly will the same effects be produced in the feeble infant, of unhealthy parents, or still more, of parents absolutely scrofulous? Again, take a child of three or four years of age, in perfect health, having been without any hereditary predisposition to disease, well nursed, and hitherto properly nourished,—let it be fed upon coarse innutritious food, and confined in close ill-ventilated apartments, where neither the heat nor light of the sun has free-admission, and we shall soon see the healthy blooming child, changed into a pale, sickly, leuchophlegmatic object.* During the whole period of youth the same condition may be induced, although, as we advance in life, a longer time

*The same is observed in the lower animals. It is well known that cows confined in close stables in towns become tuberculous, and would die consumptive if not sold to the butcher in the commencement of the disaase; and that rabbits may be rendered tuberculous in the course of a few weeks, by confining them in a close humid place, and feeding them on innutritious food; and they are as often as speedily cured by removing them to a well-aired, dry situation, and giving them nutritious food

is requisite to affect such constitutional deterioration. But up to the period of the full developement of the system, until the body has ceased to increase in stature,—has reached maturity and acquired the stability of the adult, tuberculous cachexia may be readily induced. After maturity the powers of the system in resisting the causes of disease are greater than at an earlier age; still we see the same results produced by similar causes,—the constitutional affection being the same, although it is induced more slowly, and manifests itself in a different manner, according to the age and peculiar constitution of the individual.

The principal causes which induce tuberculous disease may be arranged under the heads of improper diet, impure air, deficient exercise, imperfect clothing, inattention to cleanliness, abuse of spirituous liquors, and affections of the mind.

Improper Diet.—The most powerful are those causes which interfere with the due nutrition of the body. An imperfect supply of food, or food of an innutritious quality forms a very efficient cause, although we have rarely an opportunity of observing the effects of this alone; because when the means of procuring proper nourishment are wanting, other causes are generally in action at the same time, such as residence in ill-ventilated, and dark apartments, exposure to cold from imperfect clothing, &c.; all of which are often combined, and hence more speedily effect the deterioration of the health. But proper food, when taken in excess, or when of too exciting a quality, may also induce tuberculous cachexia in youth,—a circumstance which is not sufficiently attended to—I may say not generally understood, even by medical men; nevertheless I hold it to be a frequent cause of scrofula. Imperfect digestion and excitement of the digestive organs in the one case, and inadequate supply of nourishment in the other, lead ultimately to a similar state of disease;—the form and general character which it assumes may differ, but in both cases the result may be the same. The adaptation of food, in quality and quantity to the age of the individual, as well as to the powers of the digestive organs, is too little considered, and the evil consequences of this neglect are often evinced in the children of the wealthy classes, who are frequently allowed an unrestricted use of the most exciting kinds of animal food, than which there cannot be a greater error. By a too stimulating diet at this early age the digestive organs become over excited; the biliary and other secretions connected with digestion are diminished; congestion of the abdominal circulation ensues; and the skin, sympathizing with the irritation of the internal surfaces, becomes dry and harsh, and cutaneous eruptions, or copious perspiration, are common consequences. The ultimate effect is often tuberculous disease, which is generally attributed to imperfect nourishment; and on this erroneous view, steel and other tonics and stimulants are prescribed, by which the evil is increased.

Impure air.—Next to improper or deficient diet, I would rank an imperfect supply of pure air. The assimilation of the chyle or nutritious element of our food, is completed during its circulation through the lungs, and by being brought into contact with the atmospheric air in the process of respiration. It is, threfore, quite evident, that when the respiration is imperfectly performed, from a defective action of the res-

piratory organs,—the consequence of disease, of a sedentary life, or of unnatural position of the body,—or from an imperfect supply of pure air, perfect assimilation cannot be effected.

In the confined districts of large and populous cities, where neither pure air nor sufficient light can enter in consequence of the obscure and overshaded sites of the buildings, the food of the inhabitants cannot be assimilated even though the supply be unexceptionable. A sensible writer on scrofulous diseases considers impure air as their only real cause; other causes may assist, but this he considers essential to their production.

Although I admit the powerful influence of impure air in the production of scrofula, I cannot entirely coincide with M. Baudelocque. I feel satisfied that the other causes which have been mentioned are capable of inducing scrofula, while the patient is breathing a very pure air. The disease not unfrequently affects the inhabitants of elevated and dry countries, where the atmosphere is pure, and where the people, being occupied in grazing sheep and cattle, are so much in the open air, and the purest air also, during the day, that the confined atmosphere of their close hovels can scarcely be considered the chief cause. Other and more evident causes exist in the coarse and innutritious vegetable food which forms almost their only sustenance, in their scanty clothing and their exposure to the inclemency of the weather. But there can be no doubt that the habitual respiration of the air of confined and gloomy alleys in large towns, as well as that of many manufactories, of work-houses, and schools, and of our nurseries and very sitting-rooms, is a powerful means of augmenting the hereditary predisposition to scrofula and of inducing such a disposition *do novo.* Almost all the children reared in the work-houses of this country and in similar establishments abroad become scrofulous,—more, I believe, from the impure atmosphere which they breathe, and the want of sufficient exercise, than from defective nourishment.

Were I to select two circumstances which influence the health, especially during the growth of the body, more than any others, and concerning which the public generally, at present most ignorant of them ought to be well informed, they would be the proper adaptation of food to difference of age and constitution, and the constant supply of pure air for respiration.

Deficient Exercise.—Deficient exercise ranks next as a cause of tuberculous disease. If a due supply of proper food and pure air are necessary to nutrition, bodily exercise is scarcely less so to insure the proper growth and developement of the body. The amount of exercise necessary to produce this effect, and to maintain a healthy state of the system, will vary according to the age and the constitution of the individual; but without exercise we have abundant proof that there cannot be sound health, more particularly in early life.

Excessive labor.—While a certain quantity of exercise is necessary to the maintainance of health, excessive labor, particularly in early age, may be ranked as a cause of disease. It exhausts, and debilitates, and in youth checks the full growth and development of the body.—

When labor is carried on in confined apartments, its injurious effects are more decided and more rapid.

Imperfect clothing.—Proper clothing is essential to the preservation of health in civilized life. An imperfectly protected state of the body in the cold season, especially when the individual is engaged in a sedentary occupation, and has not exercise sufficient to sustain the circulation of the fluids, is most injurious, particularly to young persons, in whom a vigorous circulation through the extreme parts of the body is essential in order to promote its growth and development, to secure the due performance of the cutaneous functions, and to prevent sanguineous congestion of the internal organs. These objects cannot be effected without exercise and warm clothing. While on this point, although the subject has become trite, I cannot abstain from noticing the pernicious effects of the modern system of female dress. Since the free expansion of the chest,—in other words, the unimpeded action of the organs of respiration,—is essential to health, the employment of tight stays and other forms of dress which interfere with these natural actions must be injurious, and cannot, therefore, be too strongly censured.*

The Old Humoral Pathology.— We are glad to see the infatuation which has been in possession of the medical mind, for the last 40 years, gradually passing away; we are glad to see, that, although the science of medicine has been during that period repeatedly remodeled, its votaries are beginning to believe that it has not been reconstructed on a better or surer basis; and we are glad to see a taste growing up in the profession, for the writings of such men as Sydenham, Huxham, Hillary, Heberden, Cleghorn, etc. Pathological lesions are a phantom, which has been long enough pursued; they have reflected some light on what morbid action can produce, but they have given little or no information as to the nature of morbific action itself; they have improved the natural history, but in very few respects the treatment of disease:—*Ed. Rec.*

Before dismissing the subject of alterations of the blood, M. Monneret has very appropriately re-called to his reader's attention the opinions of one of the physicians of the last century, Dr. Huxham, on the influence which such alterations have in the production of fevers and other diseases, with the view of comparing them with the doctrines of the modern humoral pathology.

Huxham commenced his account of fevers with a description of a simple fever of synocha, which, he says, is produced by an increase in the action of the solids on the fluids of the body, and by the subsequent reaction of these upon the former. He mentions three cases in which

*I beg leave to refer to the excellent article on PHYSICAL EDUCATION in the *Cyclopædia of Practical Medicine*, by Dr. Barlow, for some very judicious observations on this subject.

this morbid state may be induced. The first is that of a person who has taken any violent exercise; here the mere excess of the action and reaction of the solids and fluids on each other is sufficient to bring on the state of simple fever. In the second case, the quantity of the fluids is increased; as for example, by the sudden check of the perspiration, when this is abundant: fever is the consequence, and nature makes an effort to get rid of the excess of the humors. The third, is that of a person who has drank a large quantity of wine or any other stimulating fluid; the excitement brings on a simple fever, which, however will quickly yield to rest and abstinence.

Sometimes the blood is driven along with so much force that its globules penetrate into those minute vessels which do not usually admit them; hence the obstructions and congestions which so often occur in the course of some fevers. The chief remedial agent recommended by Huxham is bloodletting, 'which by diminishing the quantity of the red globules renders the moving force more feeble.'

Now this idea, that the detraction of blood has the effect of diminishing the number of red globules, has been found by the researches of MM. Andral and Gavarret to be quite correct; and it is curious to observe that the results of recent analyses, are in perfect harmony with the assertions of the old pathologists—assertions too, based upon more speculative theories. We have already stated that in plethora there is always an increase in the quantity of the red globules, and that bleeding is the appropriate remedy for this condition; seeing that it very quickly diminishes the quantity of these, and does not very sensibly affect the proportion of the fibrine for some time. At the period at which Huxham wrote, considerable attention was paid to the microscopic examination of the fluids, in consequence of the great interest that had been excited by the researches and discoveries of Leuwhoeck.

He admits three leading kinds of alteration of the blood; the two first are what he calls the constitutional states of the blood, and the third is that of its dissolution and putrefaction.

The first abnormal modification is that in which the red globules are increased in quantity, squeezed one against the other, and pressed too compact and dense; hence he says, arises an over viscid state of the fluid, and an unusual tendency to coagulate and solidify, when drawn from the body; at the same time the increased rapidity of the circulation causes an unusua de gree of friction of the blood against the sides of the vessels, causing a greater developement of heat. When such is the case, there is always a disposition to synochal fever, and to obstructions in the minute vessels. He attributes the buffy coat to the heat of the fever, which tends to coagulate the serous portion of the blood, and to convert it into a jelly.

We need not say that the theoretical edifice constructed by the English physician with so much ingenuity crumbles down before the recent analyses of the blood: as to the notion of the greater friction of the globules against the walls causing a greater evolution of heat, we all know that it is quite conjectural, and far too mechanical to be true.

2. The second morbid constitution of the blood is characterized by the diminution in the quantity and in the density of the globules, and by

an increase in that of the serum or watery portion. This condition is accompanied with pallor of the surface, great weakness, imperfection of the secretions, and a tendency to dropsical effusions. There is also a disposition to obstructions, not indeed of an inflammatory kind, as in the former case, but of a cold or torpid character from the diminished excitability of the vessels, in which the blood is apt to stagnate. Passive congestion too are liable to take place in this manner. The diminution in proportion of the red globules, which Huxham had adopted on hypothetical grounds, has been demonstrated in the present day. This condition is observed in cases of anæmia, and of cachexia induced by long-continued chronic diseases.

3. The dissolved state of the blood is observed in scurvy, which may be considered as the type of this alteration: hæmorrhage and adymania are the chief phenomena indicative of its existence. The coagula of the blood are soft, loose, diffluent, and without any buffy coat. The serum separates only imperfectly from the coagulum. The blood drawn from persons affected with petechiæ and ecchymoses often forms a uniform semi-coagulated mass of a darker color than usual, and passes readily to putrefaction. Huxham believed that the hæmorrhages are generally owing to the acrimony of the fluids destroying the contexture of the blood itself and corroding the minute capillary vessels. He says that, if we examine the blood while within the vessels, we may observe the globules elongated to enable them to traverse the small tubes. He thence infers that they become broken up in their passage and that their debris enters readily the excretory vessels and transudes from their extremities. He thus accounts for the hæmorrhage which not unfrequently occurs from the bowels and urinary passages, as well as for the petechia and ecchymosed spots on the skin and some of the mucous surfaces. A dissolved state of the blood is not incompatible with the development of inflammation. Huxham describes particularly an epidemic pneumonia which was exceedingly fatal, especially among the inmates of prisons, ships, &c., and in which, although all the symptoms of the disease of the lungs were present, the blood drawn was soft and devoid of its normal consistence. The causes of this condition of the blood are, according to him, two fold. In some cases it is the result of spontaneous changes within the vessels, and in others it is induced by the introduction of poisonous matters into the system. Among these—the poisonous matters—he enumerates alkaline salts, muriate of ammonia (which has the effect of destroying or dissolving the blood globules very rapidly,) cherry-laurel water, mercury, salt, and decayed provisions, the virus of serpents, &c. An elevated temperature has been considered by some to be sufficient to induce a dissolved state of the blood. Boerhaave tells us that he confined a dog in a heated stove, and that, in proportion as the animal sweated profusely, he observed a tendency to hæmorrhage from various parts of the body. However, we may view the experiment, it will be admitted by all that fevers, in which the blood is in a thin uncoagulable state, are more common in hot than in cold and temperate climates.

As to the intrinsic causes, or those which are generated within the system itself, we may allude first to the admixture of purulent and other

septic matters with the blood. The recent experiments of Gaspard, confirmed as they have been by subsequent researches, have most satisfactorily demonstrated the striking changes which the blood undergoes by the contamination of such matters. They seem to act more especially by modifying the relative proportions of the fibrine and the red globules, either by diminishing the quantity of the former or by increasing the quantity of the latter.

In taking leave of Huxham, we cannot avoid expressing our admiration at finding in his writings such a multitude of curious facts which, far from having been overthrown by the discoveries of modern analysis, have been confirmed in a very striking manner by them; and our admiration is the greater when we remember that it was only by reasoning and hypothesis that he was led to the enunciation of such important truths.—*N. Y. Lancet, from Gazette Medicales.*

Gonorrhœa in Females. By John Hunter, F. R. S., *Delivered at St. George's Hospital, London.*—The disease in women is not near so complicated as in men, their parts being much more simple. This is one reason why the disease is not so easily known in them. A second reason is their being very subject to a disease which is very similar—the fluor albus. This disease is so much like it, that it is impossible to distinguish one from the other by appearance only. The discharge increasing is no proof, nor the color; for the fluor albus is sometimes yellow, and changes to green, likewise varying in quantity. The only rule we have to go by is the preceding circumstances and consequences. That is, if she has been known to be connected to an injured man, or has infected one. But such circumstances are no absolute proof, for it is very possible for a woman to have such connection and receive no injury, and from such connection to communicate it to another person who cohabits with her, without receiving it herself, the matter being lodged in the vagina. Therefore, there does not appear to be any symptom or testimony which can absolutely prove that a woman is clapped.

The symptoms of the disease will be according to the parts which are concerned. Sometimes it causes very disagreeable sensations; the labia nymphæ, and orifice of the urethra become sometimes exceedingly sore, not bearing to be touched; all the urethra becomes inflamed, and gives great pain in making water. The vagina is not a very sensible part; therefore, when the disease is only there, it causes little pain. The inside of the labia, nymphæ, and clitoris have great sensibility, similar to the glans in males, therefore, when they are inflamed, they give great pain. The symptoms in females are milder, from the parts undergoing no change, except in making water, which is not the seat of the disease in them; whereas, that being the seat in males, and the frequent changes which the parts undergo from involuntary erections, very much aggravates the symptoms, and chordee, swelled testicles, &c., which are symptoms that cannot exist in females. Sometimes they have the bladder sympathising with the urethra, as in men. Some authors have spoken of the ovaria swelling, but this I do not credit.

A man having a clap after being connected with a woman is no proof that he received it from her; it should not always be attributed to the

last connection, because it might have been caught in some preceding connection. No proof can be had of a woman's injuring a man but from a man of veracity, who assures you that he has had no connection with any other woman for many weeks before.

A gentleman who had been clapped took a kind of aversion to the disease, and was determined in his own mind never to get the disease again; he therefore provided himself with a cargo of machines to take with him to Turkey, where he was going as a volunteer to join the Russian army, which was then at war with the Turks. On his return to England he still continued the same precaution. He became acquainted with a celebrated lady, who was kept by a nobleman's brother; with this lady he had frequent connections, but not without the use of his machine; he being very intimate with her keeper, and finding that he had no complaint, he one day thought he might venture without any precaution, the consequence of which was that in a few days he found he was clapped; this was four years after his former clap. He applied to me, and desired I would examine the lady, which was likewise her own request, fearing that she might injure her keeper. I went without giving her any notice, that she might not have an opportunity of cleansing the parts, and I could not find that she had the least symptom. I desired that she would acquaint me in confidence whether she had connections with any others beside her keeper and his friend; she assured me she had not, except with a merchant in the city, who was a married man, and she believed was not injured, nor her keeper neither. Such instances as these are frequent, and how it happens is difficult to determine. Her keeper or the merchant might have been connected with another woman, have received some venerial matter, and deposited it in the vagina of this lady without its affecting either of them, and this gentleman, who was injured, might have received it in that manner.—Another way of accounting for it is, by supposing that she might be injured without knowing it, and that her keeper and the merchant did not receive it from being accustomed to such stimulus; and that the third gentleman caught it from not being habituated to it for four years.—Whether the disease can continue in a slight degree in women for many months, without wearing itself out, is not certain, but if it is so in them it is different from what it is in men.

From some very strong proofs, it appears that the disease is capable of going on in women for years, and that unknown to themselves. The venereal matter in women is very apt to run down the perinæum, and produce chancres about the anus, and claps sometimes. The disease is entirely local in both sexes, but the constitution frequently sympathises with it, causing small rigors. This is more frequent in those who have the suppuration late. When there is pain in making water from an inflammation of the meatus urinarius, and a discharge from that part, it is a pretty certain symptom of infection; but it requires a very nice examination to discover from whence the discharge comes. The carunculæ myrtiformæ, being very sensible parts, become very painful when inflamed. From some cases which have come under my notice, the disease appears to continue in the vagina for years, without apparently affecting the patient, although capable of infecting another.

If so, it is very different from what it is in men, for there it always wears itself out.

Abstinence and Repletion.—So frequently have we witnessed undoubted and great evils result from protracted abstinence, and so often have we been enabled to arrest the progress and counteract the effects of various chronic affections, by a generous and an invigorating diet, that we cannot refuse presenting to our readers the following remarkable case from the *London Lancet*, inasmuch as it strengthens and confirms the truth of the views for which we have, already, on several occasions, strenuously contended.

Ed. Recorder.

Abstinence and Repletion. By John Taylor Brompton, Eng.—The remarks of Dr. Clutterbuck on total abstinence and temperance, as to their effects in the case of the celebrated and good Dr. Birkbeck, and on people in general, reminds me of a very strong case in point, which I witnessed in Dublin in 1822.

In May, 1822, a young English lad, about sixteen years of age, joined his family in Dublin; he came straight from Paris, where he had spent about fourteen months. He was at his arrival, although of a sanguine constitution, both pale and thin, like one of those members of a broken-down family, whom every body sees at once have been under-fed. When his father began to interrogate him about the loss of his color and flesh, it came out that he had been for the space of twelve months subsisting on *half a franc a day for all his meals*, in order to economize and save the means of travelling, that he might rejoin his friends. His salary itself was only thirty francs a month, and his labor as copying clerk to a French book-seller lasted sixteen hours per diem.

It would, indeed, be a difficult task to describe the nutriment on which the poor boy had lived; but butcher's meat, strange as it may seem, was one of the articles of his diet. Fancy, Mr. Editor, what that meat must have been, sold *at four sols per plate;* fancy to yourself a poor growing boy, rising with undiminished appetite from every meal during twelve months. He has often said that he never once felt the glow of genial warmth at night in bed the whole time of this probation. He went to bed cold, trembled, and shivered, until he fell asleep, and arose with the same chill pervading his skin.

The Irish are most hospitable people, and take pleasure in surfeiting their friends. The poor lad had no longer any lack of anything; instead of his two wretched meals a day, he had four meals, almost *episcopal*, at the sight of which even jolly Anacreon might have showed his gums. In less than a month his color had returned, his limbs had grown round again, his stature visibly increased, and great ugliness had given place to what are called "very good looks."

About this time certain itchy pimples first appeared on his chest, which multiplying rapidly from day to day, very soon covered the whole body, except the face, neck, and soles of the feet. A youth who slept with

him caught the distemper a few days after; it also spread over his body, but more inertly, and not to the same extent. After the body had been thus spotted with detached pimples for some weeks, the pimples grew together, especially towards the joints, and large scabs were formed, from which issued copious discharges of matter of a yellowish white, entirely free from smell. Scales of dry scab would frequently come off on removing his coat at night: there were very few pimples on the hands, and the last place which became effected was the skin between the fingers. All these pimples itched both day and night; sometimes to a degree hardly endurable.

The doctors called this dreadful eruption *herpes*. It greatly affected the spirits of the poor lad, but not at all his health, or his looks, which had gained so much from the great change in his diet. A very skilful practitioner took charge of this case, and refused to give any medicine for it until it had quite covered the young patients body. He said that it was a grand effort of nature to purify the impoverished blood of one who had been so long under-fed. After waiting three months to let nature do her work, he prescribed an onnce of Epsom salts dissolved in a quart of water to last three days, besides some antiscorbutic pills, and a plain ointment for local application. The disease was soon mastered by these remedies, and disappeared quite as quickly as it had come.

I witnessed the facts I have related, and from them I gather that Dr. Clutterbuck is right, and that abstinence ought not to be carried too far, where people possess the means of living well. Let us all avoid excess, and be content with moderate enjoyment. But let us never forget that if indulgence may be too lax, mortification may be too rigid for social beings.

Re-union of the Fingers.—M. della Fanteria attended a young girl who had too fingers cut off by accident while engaged in domestic affairs. He found the fingers in some bran, in which they had fallen; but to his great surprise they were both cut into two pieces. He nevertheless, determined to reunite them to the hand, which he effected by strapping and sutures. At the end of a few days union was perfect, and the poor girl thoroughly recovered the free use of her fingers, the articular motions continuing. [!] This case is verified by the celebrated Vacca, and by Prof. Centofanti.—*Prov. Med. and Surg. Jour.*

Re-union of a Separated Portion of Finger. By A. Graham, Falkirk. A joiner of middle age, and apparently healthy constitution, while splitting wood with an axe, cut through the index finger of his left hand, between the first and second phalanges. He lifted the separated part from among the shavings, and immediately walked a few yards to a place where Mr. Graham happened to be. Being asked for the amputated portion, he took it from his waistcoat pocket, and laid it on the table. Mr. Graham, fixed it on by two sutures, and adhesive strap, and on the fourth or fifth day, a pair of scissors being applied to the point of the finger, he distinctly felt them. Complete union took place, with restoration of the powers of the part which had been separated.—*Edin. Monthly Jour.*

Dr. Turner R. H. Smith, of Columbia, Mo., in a letter to the *Editor*, states that "a colored boy while trimming a piece of wood with an axe, accidentally cut entirely off a portion of the last phalanx of the middle finger. The separated portion having fallen to the ground, was taken up and placed in a handkerchief which he had wrapped around the wounded finger. He repaired, at once, to the office of the family physician, which was about half a mile distant from the spot where the accident happened, but not finding him, he then came to me. When I saw him, at least half an hour had elapsed since the accident.

Recollecting that several very remarkable instances of the reunion of completely separated parts, were on record by Phearavaut, Blegury, Garangeat, Bassu and others, I determined to try if it could not be accomplished in this case. After carefully cleaning the separated portion of finger, I restored it, as nearly as possible, to its natural position and confined it there by adhesive straps, the bandage and splints. The dressings were suffered to remain undisturbed for six days, when they were removed; and to my gratification I found the separated portion completely reunited throughout, with the exception of a small place which was in a state of suppuration. In a few weeks the finger recovered completely its natural symmetry."

Suicides by Laudanum. *Mr. Editor:*—The management of a case in a neighboring city as recently published, revives in my mind a practice, which if not original has the merit of being available and singularly efficacious. The agent mainly concerned in effecting the resuscitation alluded to, was the cold stream, made to fall upon the head from the height of about two feet. The practice is judicious, but it is attended with the inconvenience of drenching the dress and bedclothes, and with the consequent danger of the secondary sedative effects from an excessive reduction of temperature.

About a year ago, a woman in Broome street swallowed an ounce of laudanum, which she had just purchased of an apothecary. I found her, an hour and an half afterwards, supine on the bed and in a settled stupor, with a languid circulation, yet skin warm and tinged with a faintish glow. I took a common enema syringe, drew in a tablespoonful of water, worked the piston gently a few times, stood back three to four feet and played away, forcing the fine vapor against her face and shoulders for a minute, when the patient began to show manifest signs of uneasiness. I persevered in this way with short intermissions, and ere long the woman was so far herself again that she could hear and understand, and be made to swallow. An ipecac draught was now administered. Sulphate of zinc (sulphate of copper is better) I have not

found for myself to fulfil the expectations so commonly ascribed to it. I still plied the vapor douche as often as a tendency to relapse appeared, until vomiting came on. The patient was next put upon her feet and conducted about the room between two women, and in one hour from my arrival she was in a safe and comfortable way. When the skin is cooled down, the syringe must be used more cautiously and for shorter periods. Other therapeutical resorts, whether conjunctive or vicarious, having each something to recommend it, are shouting in the ears, rubbing and shaking the body, whipping the skin with slender twigs, or blistering it with a spatula dipped in boiling water, the stomach-tube, stimulants combined with emetics, and in a very advanced stage artificial inflation of the lungs.

I was led to this practice in the present case, from my success some years since in this city with a patient from the lowlands of Georgia, who had remittent fever of a malignant type, and whom, as I believe, I rescued at the critical hour from confirmed coma, by persevering in this way for a good part of a night. Be assured that if any means will arouse the patient in coma incipient or advanced, this is the thing.—For any similar purpose, ice, local stimulation, &c. are not to be named with it. Yours, A. Calkins, M. D.

New York, June 18th, 1842.—*New York Lancet.*

Cold ablution in cases of poisoning with opium has been resorted to for more than twenty years, and with great success. A case occurred under our observation in 1824, and was published in the *American Journal of Medicine*, and a paper was published by us in 1828 in the *Transylvania Journal of Medicine*, entitled "*An Essay on Poisoning by Opium*," in which may be found several cases that were perfectly relieved by it, and an account of numerous experiments in which dogs, that had been rendered nearly moribund by laudanum, were entirely restored.—*Ed. Med. Rec.*

Mortality of Surgical Operations in the Parisian Hospitals.—We have not space to give the startling results of M. Malgaigne, in detail, or the comparative influence of different causes in producing death after surgical operations, but we cannot refrain, inasmuch as we are pledged, by the course we have pursued, which was prompted by experience and observation, to point out the many excessively evil consequences of protracted *starvation*, (to translate the phrase *diéte absolue*, by any other word would be like Falstaff's recommendation to Prince Hal, to call stealing conveying,) giving our readers, from the *Philadelphia Medical Examiner*, M. Malgaigne's statistical results in regard to diet.

"The diet of the patients also exercises, Mr. Malgaigne thinks, a decided influence. During the period above mentioned, the French and

German soldiers had the same regimen, whilst the Russians were rarely placed on a soup diet, hardly ever on *diete* absolue. In consequence, those who were slightly wounded received a full portion, and the others a half portion. The proportion of deaths is thus stated:

French soldiers,	- - -	1 in 7
Prussian "	- - -	1 in 9
Austrian "	- - -	1 in 11
Russian "	- - -	1 in 26."

Feeding *versus* Starving in Pox.—It is well know to hundreds that we have been in the habit of treating all the varieties of pox without restraining our patients in regard to eating and drinking. Whatever may be their habits on these points, we have not, for years, found it necessary to alter them in order speedily, safely and permanently to cure them of any form of the affection. Without wishing to boast, we may be permitted to appeal to our success, which has become, in the mouths of all those who know us, or have been under care, proverbial. For this breach of an apparently important and really popular practical principle we have been reproached, and even accused of throwing out an empyrical lure to catch patients. Those, however, who would account for the reputation we have gained in curing venerial complaints, would come nearer the true cause of it, were they to ascribe it to the successfulness rather than to the agreeableness of our treatment.

We were of opinion that we stood solitary and alone on the subject of feeding syphilitic patients, but to our surprise and gratification we find in the *Lectures on Gonorrhœa and Syphilis* very recently delivered at St. George's Hospital, London, by John Hunter, F. R. S., that he pursues the same course. Indeed, there is an ultraism of infidelity exhibited by him in the starving doctrine which contrasts strikingly with it, for he remarks, "*No kind of diet has any effect in retarding the cure*, (of Syphilis,) *and I think that a man would get equally as well if he lived ever so luxuriously, got drunk every day, and slept in the fields.*"

When an individuals mouth is sore, it is clear he cannot use solids, and therefore he is from necessity limited to liquids. There is, however, a great difference amongst these—there are those that nourish and those that do not, and Mr. Hunter is decidedly of opinion that the former, if not chewed should be used and the latter eschewed. He remarks:

"The nourishment given during salivation should be fluid, the patient

being unable to chew solids; but the fluids given should be such as will become solid in the stomach, otherwise they will nourish very little.

"Soup, broth, jellies, and all such kind of food, is absurdly given as nourishing; nature has not given us any food but what is solid, the stomach being only capable of digesting solids. It may be objected by saying that milk is a fluid; but milk becomes coagulated in the stomach, forming curds and whey; if it does not it affords no nourishment. An egg, when given raw, becomes coagulated in the stomach before it is digested.

"If a dog is fed with a pound of meat every day, and weighed, to observe what he gains by it, and afterwards is fed with the same quantity of meat boiled down with as much water as he used to drink with solid meat, it will be found that he will lose considerable in his weight, which is a proof that soup or jelly is little nourishing. Portable soup, when given solid, is nourishing, but when boiled, is little so. If a calf is killed half an hour after it has sucked its mother, the milk will be found curdled in its stomach."

Diet in India.—We often hear of the advantages of low diet, from those who would persuade or force their neighbours to resort to it.—Poor-law commissioners, boards of guardians, &c. think Hindostan an earthly Paradise. *There* the poor enjoy the beau ideal of a pauper's diet, as will at once be seen.

A man, his wife, and two children, eat two maunds of rice, which cost a rupee (2s.) in the month; if very poor, they only get with it herbs gathered in the fields, and green pepper pods; salt and a little oil are procured by those in somewhat better circumstances; the middling classes eat split peas, greens, fish, &c. The ashes of various plants are often substituted for salt by the poorest of the people. What is the effect of this miserable dietary, to which some speculators wish to reduce the hard-working people of England? "Whoever has travelled much with the natives," says Dr. Hamilton. "and been witness to the *weakness of their constitution* in resisting the changes of air and water, will agree with me in saying, that those who enjoy a diet which includes animal food and strong liquors in moderate quantities, are best able to resist the influence of unhealthy climates, and the sudden change of air." "It has always appeared (to Mr. Martin) a *great mistake* to view the diet of the Bengalee as *prescribed by climate;* on the contrary, he believes it to be far below the standard required for support under all the changes of the seasons: in the hot weather and the rains, it is not sufficient to supply the great waste; and in the cold weather, *its poverty is alike injurious to health.*" The Bengalees are inveterately idle, and will not or cannot work hard; they earn a penny, three halfpence, or two pence a-day. The Mahomedans have a better system of diet; they are, therefore, on the whole, more robust, and more capable of sustaining efforts than the Hindoos. From a calculation of Dr. Duncan Stewart, it would appear that for six years the average annual mortality of the Hindoo population in Calcutta was *one* in 17½; while in the better fed and clothed Mahomedan population, only one in 38½ died! What have the vegetable and starvation doctors to oppose to that "remarkable fact?"—*Medico-Chirurgical Review.*

MEDICAL MEMORANDA.

Dr. Schlesier says that an invariably successful method of treating "*Ulcers between the toes*," whether they have a syphilitic origin or not, is to sprinkle them thickly, day after day, with red precipitate, and then to cover them with dry charpie. The cure is generally effected in a few days.——Professor Drake of Louisville, wishes physicians to communicate to him such facts concerning the bites of venomous snakes, as may have fallen under their observation, or those of persons qualified to observe.——It is stated, as a fact, that all the candidates for admission into the Naval Medical Corps, from the Stuyvesant Institute Medical School were rejected by the Board of Examiners at their late session.——Dr. David M. Reese has been appointed Professor of the Institutes of Medicine and Medical Jurisprudence in the Washington University of Baltimore. He still retains the chair of Medicine in the Castleton Medical College.——The distress and suffering appear to be prevailing in Ireland to a fearful extent, in addition to which an alarming fever of a most malignant and unconquerable nature prevails among the poorer classes in some districts. Hunger and pestilence appear to be struggling for the mastery.——A colored woman died at Philadelphia, recently, at the age of 121 years.——Dr. Andrews, of Alabama, informs the Editor, that he has used repeated injections of cold water in Bilious Fever with great success.——Dr. Hamilton, of Burke county, Georgia, was recently and very suddenly killed in jumping out of his sulkey—his horse having become unmanageable and was running away.——A Cadiz journal mentions the appearance of a disease, strongly resembling the plague, on the shores of Portugal, where, as well as in Spain, it had occasioned no little uneasiness.——The Washingtonians of Hartford, Connecticut, celebrated the anniversary of American Independence in the first distillery erected in Connecticut. The building is 204 feet long, and there was room to set six tables the whole length. The stand for the orator was a still upside down, and capable of accommodating four persons. This is carrying the war into Africa.——Wm. A. Davis, M. D., of Springfield, Mass., won the Boylston prize of fifty dollars, which was offered for the best dissertation on diseases of the kidney.——The degree of M. D. was at the recent commencement at Dartmouth College, conferred on ten candidates.——Small-pox is becoming alarmingly prevalent

at Brooklyn, opposite the city of New York.——The hydrated per-oxide of iron, it is now ascertained will certainly counteract the poisonous effects of arsenic. Every physician should put himself in possession of this important antidote.

PROFESSOR BARTLETT.

By letter, the *Editor* is informed that Professor Bartlett will be in Lexington towards the close of next September, to resume his duties in the Medical Department of Transylvania. It is but a just tribute to this distinguished individual, to say that his services in the school to which he now belongs, and in which we fondly trust he may long continue a teacher, have been signally useful. Nor have we reason to believe that the past benefits he has conferred are at all comparable to those he will in future bestow upon the institution, for we learn that he has in the press a work that will be ready for publication in October, which will be entitled "*The History, Diagnosis and Treatment of Typoid and of Typhus Fever; with an Essay on the Diagnosis of Remittent and of Continued Fever.*" To the appearance of this work we would invite physicians in general, but students in particular, to look with impatience, as we are assured from our knowledge of his experience and talents as a physician, as well as his very eminent abilities as a classical writer, that it will be of such a character as to give him an enviable distinction as an author, while it will reflect great credit on the Medical School of Transylvania. Under these impressions we shall hail with pride and pleasure, the anticipated work of Professor Bartlett.

To Correspondents.—We hope our worthy friend Dr. Little will pardon us for deferring the publication of his article until our next number. It has resulted from necessity and not inclination: it shall certainly appear in the September number. We have received several communications, and amongst others, we may mention those of Drs. Johnson, Carson, McGuire and Groce, all of which we design, if possible, inserting in the 11th No. We would, however, say, that there may be no disappointment that we may, perhaps, not be able to accomplish this object in relation to the article of Dr. Carson, for we find much difficulty in procuring a plate to represent his new and, no doubt, valuable, instrument.

THE

WESTERN AND SOUTHERN

MEDICAL RECORDER—EXTRA.

Edited by James Conquest Cross, M. D.

Professor of the Institutes of Medicine and Medical Jurisprudence in Transylvania University, and late Professor of Materia Medica and Therapeutics in the Medical College of Ohio.

Terms—FOUR DOLLARS per annum, invariably in advance.

The Western and Southern Medical Recorder has now almost completed its first volume, and at the commencement of its second year the Publisher deems it not improper to recur to the unprecedented favor with which it has met under circumstances of the most embarrassing and untoward nature, and to promise for the future renewed and increased exertion to make it worthy of additional patronage.

This work was commenced in November last without a subscriber, and has since that time, without the least effort to obtain a circulation, acquired a subscription more than sufficient to defray all expenses, and this too with a cash subscription in advance, and at a time when the greatest pecuniary embarrassment has afflicted the whole country. The high reputation which its talented Editor enjoys throughout the South and West secured for it in advance the favorable regard of the Medical public, which has been greatly strengthened by the subsequent conduct of the work. The following notices which are taken indiscriminately from many of the same kind from various parts of the valley of the Mississippi, will serve to show to some extent the estimation in which it is held:

Dr. Thos. M. Armstrong says in the Sparta (Tenn.) Gazette, "This work is one of the finest ornaments of Western Medicine, and deserves a place in every Physician's Library.

From the Boonslick (Missouri) Democrat.

Dr. Cross is well known to the medical world as a teacher and writer of the first grade. His mind is keen and analysing; he separates fact from theory—the real from the imaginary—building only "upon the solid basis of experience and observation." He rides no popular hobby for popularity; and he is calculated

to do more real good to medical science, by his common sense and practical views of matters and things, than all the theorists in the world.

The monthly form of the Recorder is a great improvement on the old quarterly form; keeping the profession acquainted at short intervals, with the medical intelligence of the day. The editor has an article of his own in every number, replete with valuable information, and original papers from Western writers, together with choice medical analecta, both from this country and Europe, which fill up the remainder of the pages.

We recommend it as an able and cheap work; the profession, particularly in the west, should be proud of such an undertaking, and they should give it the support of their patronage and their correspondence. MEDICUS.

From the Georgia Argus.

The *Recorder* is edited by James Conquest Cross, M. D., Professor of Institutes of Medicine and Medical Jurisprudence, in Transylvania University, and late Professor of Therapeutics, &c. in the Medical College of Ohio. His eminent talents and great celebrity as a teacher of Medical Science in both Colleges, render it unneceseary for me to say anything in reference to his ability to conduct a Medical Journal. The work is designed to be strictly practical, Pathology and Therapeutics being chiefly the topics of discussion; in the language of the prospectus. "its leading, if not exclusive object, being to render the profession less speculative, and more practical; to expose the fallacy of systematic, and shew the superior importance of practical medicine."

As the *Recorder* is designed for the profession in the South and West, I hope they will not manifest that apathy in its support which is too common, and which has proved so fatal to most of our Southern Medical publications. I deem it unnecessary to enlarge on this subject to a profession that cannot but be impressed with the importance of sustaining and encouraging Southern Journals and Southern Institutions.

I should not feel justified in urging the claims of the Recorder, were I not apprised, that the recent efforts that have been made to resusitate the Southern Medical and Surgical Journal, had failed, which leaves us destitute of any Medical Journal, strictly Southern; consequently I regard the Recorder, at this time, the most acceptable candidate for Southern patronage. E. C. HOOD.

White Sulphur Springs, Ga. July 12, 1842.

A Medical friend of ours has sent us a number of "*The Western and Southern Medical Recorder*," Edited by James Conquest Cross, M. D. of Transylvania University, Lexington, Ky. Our friend, in whose judgment and qualifications we have full confidence, speaks in the following terms of the work, which can be seen at our office. *Huntsville (Ala.) Democrat.*

Dear Sir:—I send you the first number of the *Western and Southern Medical Recorder*, and feeling a deep interest in the diffusion of knowledge among the Medical profession at large, I cannot too highly recommend to the profession this invaluable work. I have received it regularly up to the 8th No. and can say, with truth, that no Journal of the kind, with which I am acquainted, is conducted with more skill and ability.

The Western and Southern Medical Recorder.—This is the title of a monthly publication, Edited by James Conquest Cross, one of the Professors in the Medical School at Lexington, Ky. It contains 48 octavo pages, and will be enlarged to 64, without any increase in the price. The number (for June) contains much interesting matter. If the work is not well patronised, it is not for want of merit. We were particularly pleased with the editor's thoughts on biliary secretion. Dr. Cross is a fine writer, and stands high in the profession.

Boonville (Mo.) Observer.

From the Knoxville (Tennessee) Argus.

Mr. Editor:—From the number of medical journals published in the United States, not one can be selected so full of sound theory and practical hints as the

"*Southern and Western Medical Recorder,*" published at Lexington, Kentucky, and edited by that distinguished scholar and scientific physician, J. Conquest Cross.

To the Western practitioner this journal is invaluable. The theories presented are from phenomena which daily present themselves in the Western clime; and the practical deductions are made or sanctioned by one of the master spirits of our profession. Prof. Cross's reputation is great. He has thrown off the shackles of authority, and follows exclusively the dictates of reason and common sense.

It is to be hoped that those members of the profession who wish to know "how to treat disease, and not to waste their time and jeopardise health by weaving fanciful and untenable theories" will uphold this publication, and show their appreciation of Dr. Cross by giving the Recorder their support. X.

From the Shawneetown (Illinois) Republican.

Medical Journal. *Mr. Editor:*—I beg leave through the medium of your columns, to call the attention of the Medical Profession to one amongst the most valuable and popular Periodicals published in the West. I refer to the "*Msdical Recorder,*" edited by Dr. J. C. Cross, Professor of the "Institutes of Medicine and Medical Jurisprudence in the Transylvania University." The "Recorder" is published monthly at $4. per annum; each number containing 48 pages, fine paper and good type.

Professor Cross is well known throughout the valley of the Mississippi, as one of the most able and eloquent teachers now laboring in the cause of Medical instruction. In a word, the Doctor is determined, by a "noble effort, to build up the science upon the solid basis of experience and observation." J. H. J.

From the Knoxville (Tenn.) Register.

The talents and ability of Professor Cross as a writer are well known to many of the Medical community, and are acknowledged to be far above mediocrity. To appreciate the merits of this journal and its accomplished author, requires only a careful perusal of its pages. It is founded upon practical experience and observation, free from scholastic dogmas which lead into many egregious errors, and is particularly adapted to the use of practitioners of the whole South and West. The author's own experience and personal observation of the diseases incident to our Southern climate, directed by a mind well stored with the fundamental principles upon which all medical knowledge is based, having practised in a Southern climate as well as in the middle portions of our country, entitle him to the confidence of the physicians of the South. And when we reflect again, that he has in possession all the facilities which can be afforded by an institution second to none in the United States, with its extensive library, anatomical preparations, &c. we are compelled to admit, that if talents and opportunity can entitle an editor to confidence, that confidence should be reposed in our author. We would therefore, as a friend to literature and merit, and to Transylvania University as our *Alma Mater*, earnestly recommend this journal to the patronage of our medical brethern generally. JAS. CARSON, M. D.

Dandridge, Tennessee.

From the Political (Ohio) Examiner.

Western and Southern Medical Recorder.—This valuable publication has now reached its seventh number, and from the merits of the articles already given, as well as its avowed purpose of dealing alone in practical matter, we would be inclined to say, it must become popular with the profession.

Systems have had a tendency to retard the progress of medicine in all ages of the world, and in none more so, than at the present time. Indeed, it has become a kind of *sine qua non* to a teacher that he first write a book—and if he writes a book, he must have a theory—and if be has a theory, he must bend all the facts he meets with to suit that theory. This is wrong. Nature must be consulted if she would be properly interpreted, and the student of medicine should consult her, instead of her pretended priests.

From the bold and manly stand the talented Editor has taken in opposition to systems, we have an earnest, that a brighter era is about to dawn upon medicine in the West, and that its march like that of the other sciences will be onward — The profession should unite heartily in this work—they have a bold leader and a strong arm to go to battle with. We hope to see the work ably sustained, and we hazard nothing when we say, that if any work of the kind can be sustained, that Professor Cross, the distinguished teacher in Transylvania, will sustain this.

Georgetown, Ohio, May 1st, 1842. B***.

From the Maysville (Ky.) Eagle.

WESTERN AND SOUTHERN MEDICAL RECORDER: Edited by JAMES C: CROSS, M. D. Professor of the Institutes of Medicine and Medical Jurisprudence in Transylvania University.

This very instructive and valuable periodical has just reached its sixth number, and we venture to affirm, (without at all meaning to be invidious,) that for usefulness and practical matter, it is unsurpassed by any periodical of the size, in this country.

Its matter is well selected, and its editorial articles and criticisms are able, just, philosophical and learned. We commend this work unhesitatingly to the members of the profession, as eminently calculated to aid them in dispelling the mists and miasmas, with which medicine has been infected, by sophists and theorists, for years past. Like the Priest-ridden world of the "dark ages," we have been hood winked by sophists and theorists, and given to drink alone of the turbid waters of systematic strife and conflict, in place of having access, at once, to the pure fountain of knowledge.

The work of pruning must be done by some one, and we know no man, whose talents, learning, and independent mind, better qualifies him for it, than Professor Cross. We hail with joy, therefore, the laudable and praiseworthy efforts of this distinguished teacher, as giving an earnest of a new era about to dawn upon Medicine in the Western country. The medical public is deeply interested in the success of his exertions, and we hope to see it give his work a liberal support. The name of its editor is a sufficient guarantee that it will be ably conducted. J.

Maysville, May 1st, 1842.

From the Richmond (Ky.) Chronicle.

MR. NEALE:—The object of the present communication is to call the attention of the Medical public to the merits of the Western and Southern Medical Recorder, a monthly periodical published in the city of Lexington, and edited by JAMES CONQUEST CROSS, M. D. one of the Professors in the Transylvania School of Medicine, a gentleman every way qualified to conduct such a work, and one who is well known to the world by the various luminous and scientific views which have characterised his researches. To the physicians of the South and West he looks for assistance—knowing, as he well does, that talent of no ordinary character exists among them. No country in the world affords so extensive a field for research as our own, and all that is necessary for the advancement of the profession, and the improvement of the science of medicine is a diligent and careful use of the advantages and a suitable application of the means possessed by us. Notwithstanding this, it is an undeniable fact that the importance of the profession has not been sufficiently appreciated in this country, in consequence of which it has been degraded even by its own members, from its high rank among the liberal pursuits to a mere avocation or trade. Heretofore we have been too prone to avail ourselves of the labors of foreigners, and to be confined to the views set forth by Eastern schools and publications; instead of exploring and cultivating our own soil, which would, were it rightly attended to, abundantly reward the laborer with a great variety of productions particularly adapted to the peculiarity of our necessities. Hence it becomes a desirable object, to multiply our means for the union of individual efforts and talents as the most efficient method to counteract those evils which are calculated to impede not only individual zeal, but even to prevent all progress in the acquisition of knowledge. With this object in view, Prof. Cross entered upon the responsible duties of an editor, and to him, we think, may be awarded that extent of PREPARATION which rendered Addison's Spectator one of the classics of his "land's language," so that if success is not destined to be his, a lack thereof in extenuation can never plead. Improvements and new discoveries are being daily made, and unless physicians patronize and read medical journals, they will in a few years fall far behind in point of acquirements, their younger but less experienced breth-

ren. By the physicians of the Southwest, the appearance of this journal should be hailed with joy, as they will now not only have it in their power to record and collect such facts as may contribute to the alleviation of human suffering and the advancement of useful knowledge, but at the same time an extensive scope will be allowed for active and systematic research. Again, incentives are offered to the exertion of talents and encouragement given to industry, whilst inducements are also presented for acquiring an opportunity for exhibiting the qualifications of the physician and the accomplishments of the scholar.

Dr. Cross, we are fully warranted in saying, will avoid as far as possible any thing like PECULIAR DOCTRINES or PECULIAR SYSTEMS in medicine. His aim will be directed to those fundamental truths on which the interest and importance of medicine are chiefly founded—aware that science should stand simple, pure and majestic; having fact, induction, and truth alone for its foundation. R. E. L.

From the Edgefield (S. C.) Advertiser.

THE WESTERN AND SOUTHERN MEDICAL RECORDER: Edited by JAMES CONQUEST CROSS, M. D. Professor of the Institutes of Medicine and Medical Jurisprudence in Transylvania University, and late Professor of Materia Medica and Therapeutics in the Medical College of Ohio.

The above is the title of a Monthly Periodical, published at Lexington, Ky.

To those, who are intimately acquainted with Professor J. C. CROSS, no commendation of the Medical Recorder is needed. His name alone, to all such, will be sufficient to guarantee unlimited confidence in his ability and capacity, to conduct a Journal of Medicine. It may, however, be necessary to state, for the information of those, who are less familiarly acquainted with him, and this number, in the profession is very limited, that Professor Cross has already acquired, by his critical and scientific researches, as well as by the practical soundness of his views, a reputation, which has deservedly placed him in the foremost rank of the profession.

His talents and learning have signally triumphed over almost invincible opposition, and he is now permitted to enjoy the well earned approbation of an impartial public. Studiously avoiding a bigoted adherence to systems, (some of *which* have brought the science of medicine into merited contempt,) and guided in his inquiries by reason and nature, he adopts those principles only, which rest upon a firmer basis, which obviously conduce to the real improvement of his profession, and of which the student may avail himself with but little apprehension of error. As a Lecturer, he stands unrivalled in popularity, and may be deemed the pillar of Transylvania University; as a Practitioner, he has acquired the unbounded confidence of the community; and as an Editor, he exhibits a profoundness of intellect, a maturity of judgment, and a versatility of talent, which cannot fail to render the Medical Recorder, one of the most efficient, and popular Medical Journals in the United States. We may therefore predict for it a success which will more than realize the anticipations of its most sanguine friends. No student of Medicine, who aspires to a knowledge of his profession, and no Physician, who desires to keep pace with its improvements, should hesitate to avail himself of such an invaluable acquisition. As to the Professors style, which is not his least advantage, it may be said, with justice, that, by his acquirements in every department of Classical Literature, he is enabled to invest every subject that he touches with an interest, of which very few engaged in his profession are permitted justly to boast. PHILO-MEDICUS.

Of the manner in which this work will be conducted for the future, we need only refer to the past and to the well known ability of its distinguished Editor. The leading, if not exclusive object of this Journal shall continue to be to render the profession less speculative and more practical—to expose the fallacy of systematic, and show the superior importance of practical medicine—to teach physicians how to treat disease, and not to waste their time and jeopardise health by weaving fanciful and untenable theories. Pathology and Therapeutics will be the topics to be discussed in the pages of the WESTERN AND SOUTHERN MEDICAL RECORDER, and as these are the branches of Medicine which

the Editor has been engaged in teaching in two Medical Schools for several years, he will be able to render it instructive, not only with selected, but original matter. But for ourselves we would say a word. It is then our intention to bestow greater pains upon the mechanical execution of the Recorder than we have hitherto done. It shall be printed upon the best paper and in the neatest manner, and should the increased patronage of the work justify it, it shall be enlarged from *forty-eight* pages, its present size, to *sixty-four* pages, making a volume of 768 pages at the close of the year, without any additional charge. From the past success of the work, we do not permit ourselves to entertain a doubt but that an increased number of subscribers, more than sufficient to cover the expenses of the proposed enlargement can easily be procured, and subscribers may therefore confidently expect it.

Those who are desirous to encourage the work, as well as present subscribers, will meet with a good opportunity to remit the amount of the subscription by the Students of Medicine who may visit Lexington the ensuing winter for medical instruction, or, if they prefer it, they will please recollect that by the regulations of the Post Office Department, every facility in this respect, that could be desired, is offered. Post Masters are allowed to forward, under their frank, letters written by themselves, containing money to pay the subscription of third parties to any periodical. To render the performance of this act of courtesy less burthensome, the letter should be prepared for the Post Master's signature, by the person wishing to avail himself of the privilege. If this is done, the favor will be rarely denied by any Post Master.

☞The notes of solvent banks, in the State in which the subscriber lives will be received by the Editor, without discount.

☞The first number of the second volume will be issued on the first Monday of January next, and regularly thereafter on the first Monday of each month.

☞All letters to be addressed to the Editor, *post paid.*

WILL. R. HERVEY, *Publisher.*

LEXINGTON, SEPTEMBER, 1842.

PERISCOPE.

Destruction of the Medical Library at Hamburg, in the recent Conflagration.—The following circular announces the severe loss which the Medical Union of Hamburg has sustained in the entire destruction of their Library. Authors of Medical Works, and editors of Medical Journals will doubtless testify their sympathy with the Union, by transmitting, where possible, copies of their works.—*Medical Intelligencer, Philadelphia.*

"The frightful conflagration which visited Hamburg in the beginning of last May has not spared the premises of the Medical Union, whose library, the fruit of twenty-six years' assiduous collection, exists no more! Such a loss cannot be repaired by pecuniary contributions. Complete series of a great number of German, French, English, American, and Indian journals and works, rare editions of the older authors, a multitude of ancient and modern medical and chirurgical encyclopædias and lexicons in various languages, scarce and curious prints, &c. are not only lost, but are no longer procurable by purchase; while many hundred volumes of old dissertations, classified according to subjects, cannot be replaced in any manner. In this strait the Medical Union earnestly requests advice, not only from its foreign members, but from all its medical brethren, where and in what manner it may once more gradually acquire possession of a library at the least possible expenditure of money. Any communication on this subject, in post paid letters or through the medium of the booksellers, addressed to 'the Directors of the Hamburg Medical Union,' or to the undersigned, will be received with the sincerest thanks. The Editors of Medical Journals are requested kindly to give insertion to this notice in their respective publications.

"*Hamburg, May* 16, 1842. F. W. Oppenheim, M. D."

Remedy for the Short-jointed Tape-worm.—Dr. Streeten recommends the following formula. R. *Cort. radicis punicæ granati* ounces ij. *aquæ* lb. ij. *macera per horas* xxiv., *decoque ad* lb. j. *adde syrupi zingiberis* ounces i. Two ounces of this to be taken every half hour until the worm is expelled. If the head become dizzy, which is not infrequent after the fourth or fifth dose, it should be discontinued. It is quite necessary that the above should be made of the bark of the root, and not of the rind of the fruit; this latter appears to be totally inert as a vermifuge.—*Medico-Chirurgical Review.*

Tannin, as an Antidote for Strychnia. By Dr. Ludicke.—The great care requisite in the employment of strychnia is well known.—Of this and of the benefits of tannin when an over dose has been administered the following case is an illustration.

A woman, thirty-seven years of age, had complained for a considerable time of great tenderness and of a wandering pain in the course of the transverse and descending colon, for which opium and various other remedies were unsuccessfully employed. Dr. Ludicke then ordered one twenty-fourth of a grain of nitrate of strychnia every hour.

This dose, however, the patient ventured to increase, and continued to do so till she had taken half a grain of strychnia in the course of six hours. She was now suddenly seized with vertigo, and fell to the ground in a state of insensibility. A quarter of an hour afterwards she complained, though speaking with great difficulty, of having had a sensation as though her spine were being bent backwards, which had then passed off, leaving pain in the back, and tremor of the hands.—The respiration was difficult, the pulse feeble and frequent, and the patient had a sensation of nausea with giddiness whenever she attempted to sit upright, and occasional vomiting. Ice was applied to the head, and half a grain of tannic acid was given every hour, at first in an effervescing mixture, on account of the sickness, afterwards in distilled water. After twelve grains had been taken the writer substituted for it a decoction of two ounces of oak bark in six ounces of water, with an ounce of syrup of cinnamon and a scruple of sulphuric æther. The symptoms of poisoning all disappeared, and with them the wandering pains from which the patient had previously suffered.

Mesner, in Dresden, recommends, as an antidote for strychnine, decoction of galls or of oak bark: five ounces of which precipitate two grains of nitrate of strychnine. These decoctions likewise precipitate morphin, codein, brucin, veratin, and many other vegetable alkaloids.—*Brit. and For. Med. Rev., from Medicinische Zeitung.* Mars 16, 1842.

Worm-trap—a new Remedy.—Dr. Stockbridge, Jr., of Bath, Me., is in possession of a rare curiosity, a knowledge of which may ultimately lead to some important pathological results. A child accidently swallowed several metallic eyes—a well-known article, manufactured of silver-plated wire, and used mostly by ladies in fastening their dresses. In due time they were voided—and, to the astonishment of all, each eye was completely threaded by a worm, of the common size, from five to seven inches or more in length. Some had caught three; and in others, the worm had succeeded in passing through two of the rings, or parts which are stitched to the garment. But they were all of them so securely confined that they cannot be extricated. Under ordinary circumstances, when other remedies fail as a vermifuge, would it not be justifiable to prescribe a dose of hooks and eyes! A fact so singular as the one we have here related, should not be lost sight of; since it may give rise to a new mode of expelling from the body those alarming tenants of the intestinal tube, which sometimes maintain their position against all medications, producing extremely acute suffering, protracted misery, and even death.—*Bost. Med. and Surg. Journal.*

"On the Treatment of Colica Pictonum by Warm Water By John Wilson.—The mode advocated in this paper, in the Med. Chirurgical Transactions, is the use of the warm bath, and the injection at the same time of some of the water into the intestinal canal. Copious evacuations have been procured in this way, with speedy relief of the pain, when all other remedies had failed Cases illustrative of its success are narrated. The plan is applicable to other diseases in which obstinate constipation is a prominent symptom. It is very simple, and deserves a trial.—*British and Foreign Medical Review.*

THE

WESTERN AND SOUTHERN MEDICAL RECORDER.

EDITED BY JAMES CONQUEST CROSS, M. D.

Professor of the Institutes of Medicine and Medical Jurisprudence in Transylvania University, and late Professor of Materia Medica and Therapeutics in the Medical College of Ohio.

No. 11. LEXINGTON, KY. SEPTEMBER, 1842. Vol. 1.

ESSAY ON THE NATURE AND IMPORT OF STOOLS IN DISEASE.

BY THE EDITOR.

(Continued from page 448.)

We have said that tarry or pitchy dejections, when they occur in the course of acute abdominal affections, are uniformly succeeded, unless the patient dies too soon, as he often does, by those that are bloody, and that these, almost uniformly, terminate, speedily, in death. Now, such evacuations, in the circumstances just indicated, certainly come from the liver, and we are not aware that bloody stools, under other circumstances, ever came from that organ. Sanguineous discharges *per anum* are not very unfrequent, but they, with the exception just considered, come from the bowels, and, in their consequences, are rarely dangerous. Their origin has been fully and ably discussed by Drs. Ayre and Graham: the former, in his observations on '*Disorders of the Liver*,' and the latter in his work on '*Disorders of the Stomach and Liver*.' The former affirms, while the latter denies, that they come from the liver, and contends that they are poured out by the stomach and bowels. The facts of Dr. Ayre are not less vague and unsatisfactory than his reasoning, on the subject, is inconclusive, while Dr. Graham by an appeal to facts which

every physician has witnessed and deductions made from them, that reason sanctions, has rendered it almost certain that, in the great majority of instances, bloody stools proceed from the bowels.

Successful, however, as Dr. Graham has been in exposing and refuting a fundamental dogma of Dr. Ayre, it is not difficult for the experienced practitioner to perceive that he has fallen into one of those gross errors into which the spirit of too hasty generalization rarely fails to lead. Having shown that Dr. Ayre is mistaken in supposing that bloody dejections come from the liver, he hesitates not to affirm that the black color which the alvine dejections very frequently exhibit, is, in all cases, owing to the blood that is admixed with them. Every southern physician will smile with derision at the absurdity of this allegation; an allegation which experience never suggested nor principle explained. Were this true, then would it follow that, not only in all summer and autumnal complaints, there is hæmorrhage from the bowels, but also whenever a dose of calomel is given, even in health, and the evacuations become black, they do not, according to Dr. Graham, derive this feature from the disgorgement of the liver, and consequently from an afflux of bile into the bowels, but from an organic lesion of the blood-vessels of some portion of the intestinal canal. In all these diseases the discharges become black before they recover their natural color, and this result never fails to be produced when the action of the liver has been efficient; and this circumstance is regarded as an auspicious occurrence, for experience proves that then the patient rarely fails to give unequivocal indications of decided improvement, which could hardly result from a lesion of the gastro-intestinal blood-vessels. Indeed, it is obvious that not only could not the patient improve under such circumstances, but that if the blackness of stools is owing to the presence of blood, they never could resume their natural complexion under the use of calomel, as each successive dose would necessarily render the bleeding more and more excessive.

It does not seem that the physician should find much difficulty in deciding upon the presence of blood in the alvine dejections, for that which we have traced through the intestinal canal into the bile ducts has always been very dark and grumous, while that which we believed proceeded from the bowels, particularly the lower, has always been of a red and often of a bright scarlet

complexion. But it is easy to conceive that an admixture of blood, when it flows from a high part of the canal, so that it is mixed with the other contents, and has had time to assume a dark color, before it is discharged, sometimes gives to the discharge an appearance similar to that given by certain states of bile. They may be distinguished, however, says Dr. Phillips, and this we have often verified, by dilution with water; and if the change of color arise from bile, a greenish or yellowish shade will be produced; if from blood, a dark brown one, or as Dr. Graves recommends, if blood be present in the evacuation, it can easily be recognized by putting a portion of the discharge in a small linen bag, into warm water, when, after remaining some time, the linen will be stained of a reddish color. Thus, by these simple tests, we can easily ascertain whether or not there is blood in a dejection that presents a suspicious or doubtful character.

The dark or black evacuations which calomel rarely fails to bring down, have been, like those that are green, ascribed to the chemical action of the mineral upon the intestinal contents. This opinion is daily rebuked by observation and experience. If true, they would become darker and darker, under its use, while we know they present, in succession, various shades of color and ultimately resume the natural complexion.

The odor of stools is a property which deserves the close attention of the physician. When inodorous or extremely fœtid, as they often are, they are then doubtless unnatural and morbid, and it is important that we should be able to determine the cause of such peculiarities. On these points, as on most of those connected with the alvine dejections, considerable discrepancy of opinion exists. In regard to their fœtidness, which is sometimes excessive, Dr. Graham and several others, who appear to have paid some attention to the subject, maintain that it is owing to intestinal irritation. According to this opinion, therefore, their offensiveness should be in proportion to the irritability of the lining membrane of the bowels. This, however, so far from being true, it is conclusively proved by observation, that when they are the least offensive, the bowels, as a general rule, are the most easily excited to inordinate action. In lientery, for example, there is great intestinal irritation, as the very frequent evacuations clearly illustrate, and yet the matter discharged from the bowels exhales

no odor. This is the case in Asiatic Cholera, in which the stools are excessively frequent, liquid, inodorous and exhausting. In Infantile Cholera, nearly the same state of things obtains. In dysentery the bowels are very irritable, and the evacuations consist of blood and mucus, but are not offensive. Even in jaundice, in which the bowels are commonly torpid and the stools inodorous, we occasionally find the bowels irritable and the dejections thin, without still any fetor being observed. In fever, we often observe a similar state of the intestinal tube giving rise to evacuations that vary much in frequency and color, without being at all offensive. These facts are sufficient to show that the excessive fœtidness of stools, often observed in the course of disease, cannot, with propriety, be ascribed to intestinal irritation.

In all the diseases to which reference has been made, there is to be observed, as a leading and very conspicuous feature, inefficient action or a torpid state of the liver;—that during this condition of the biliary organ, the inodorousness of the alvine dejections persists. This circumstance, the physician, who is acquainted with the part which hepatic derangement performs in the diseases of summer and autumn, and recognizes the importance of rectifying the biliary function, never ceases to regard with anxiety and solicitude. Abundant experience induces him to look upon inodorous dejections as an infallible indication of a disordered state of the liver, which it is indispensable to correct; and although, as we shall subsequently point out, when he discovers colorless stools, or those that are nearly so, assuming a dark appearance, he believes the liver is being aroused from its torpid state, he feels no confident assurance that he will be able to restore it to a healthy condition, until after they become decidedly fœtid.

While we regard the offensiveness of the alvine dejections, as, in most cases, wholly independent of intestinal irritation, and as being necessarily associated with hepatic activity, it must not be concluded, as has been already intimated, that we believe that the contents of the bowels, when they show an admixture of matter which has evidently come from the liver, must be, necessarily, always offensive. Such an opinion would be not only very erroneous, but often dangerous, in its practical bearing on the treatment of disease, for it frequently happens that dejections are rendered dark or black by a matter that incontestibly comes from the liver,

but which is wholly unlike the healthy biliary secretion, and entirely incapable of affording any decided relief in morbid states of the system; and if relied on, as it not uncommonly is, as evidence of efficient biliary action, will inevitably lead to the enforcement of inappropriate therapeutical principles.

The truth of these remarks is illustrated by what quite commonly occurs during the course and progress of the fevers that prevail in the middle and Southern States. In those affections we often see evacuations that are dark and thin, but inodorous for many days in succession, and that too, although the system may have been under the uninterrupted action of mercurial medicines. Such dejections we do not look upon as evincing an inactive state of the liver, but as indicating a perverted and an inefficient condition of that organ. The matter that is poured out by it, and which gives color to the stools, may, and often is, sufficient to keep the disease at bay; it often seems to be stationary—giving no evidence of exasperation, while there is not perceived any obvious or decided tokens of improvement. These, so far as my observation extends, are never made manifest until after the stools become offensive, and then they are seen to acquire greater consistency. On this point we wish emphatically to dwell, inasmuch as we have very often seen such evacuations as we are now considering, obstinately urged as proof of proper biliary action, and consequently many individuals sacrificed because of an unwillingness to persevere in the use of such means as are relied upon, to reform perverted biliary secretion. When, however, under such circumstances, we have been allowed to direct the treatment, and have enforced the use, of mercury, generally calomel, in a decided and firm manner, we have very commonly been gratified with being able to render the stools offensive and consistent.

In the management of such acute affections as prevail during summer and autumn, in the western and southern portions of the United States, we look upon every alvine dejection, whatever may be its other attributes, as unnatural and unfit to be relied on, that does not exhale an odor more or less resemblant of that which characterizes healthy dejections: and until this does actually happen, we never pause or hesitate in the use of such articles as are regarded adequate to the rectification of perverted or vitiated biliary action; for until then, such improvement as should sa-

tisfy the physician, is never observed. It sometimes, though rarely happens, that the most judiciously directed and energetically enforced treatment may be foiled and defeated, but this should not deter the physician from persevering. Without dark, consistent and offensive stools, recovery cannot take place, and after deciding upon the indication, calomel should be freely used until other and more certain means of correcting deranged biliary secretion are discovered. We are far from confiding in that practice which consists in the exclusive use of calomel, and that too in drachm and ounce doses, in all obstinate cases of disease, but we are convinced that when there is perverted or suspended biliary secretion, it is more entitled to respect than any other article, and therefore its enforcement, in our hands, is guided exclusively by the obstacle to be overcome. Let the physician deliberately determine what should be done, and then do it quickly, and without any imbecile misgivings on the subject. If calomel is indicated, let it be administered boldly and fearlessly, and rarely will the sensible practitioner have any excuse for self-reproach. On this principle we have acted, and although we have occasionally been discomfited, we have had, in very many instances, the gratification to believe that we have been the humble instrument of saving many valuable lives.

Many cases in illustration of the truth of what has been said, might be here adduced, but we shall be content with giving the outlines of one that occurred in the person of a distinguished individual from the State of New York, formerly a Cabinet officer. A few days after his arrival in Kentucky, he was attacked by what he denominated the '*Lake Fever*,' the characteristics of which were great heat of skin, full and rapid pulse, and so great a determination to the head as to threaten apoplexy. He was bled very freely and purgative medicines were given, which acted frequently and fully. These expedients seemed to answer no other purpose than to abate the determination of blood to the head, and consequently to protect the brain from serious lesion, for the skin and eyes soon became yellow and the alvine evacuations thin and of a dirty appearance, which circumstances seemed to indicate an inert state of the liver. On account of a difference of opinion between the patient and ourself in regard to the nature of his disease and the course of treatment which should be pursued, it was

not encountered with the decision which it would have been, had he cheerfully and willingly placed himself under our control. He wished to take quinine and laudanum, while we urged the indispensable necessity of pushing the use of such articles as we thought would energize the liver. He being obstinate and we being comparatively young, though far from inexperienced in the profession, a rather irresolute and temporizing course of treatment was followed for the first two weeks of his sickness. At the close of the first week a consultation was required, and contrary to my advice, a strong emetic was given which produced, as was foretold it probably would, great exhaustion which threatened to sink him into collapse. This, together with increased torpidity of the liver, which we have generally found to result from the use of emetics in fever, where there is observed to be an indisposition on the part of that organ to perform its duty, which was also predicted, inspired him with as great confidence in our advice as he had previously felt distrust.

By this time, however, the patient, by a weak and vascillating practice, was reduced to a very dangerous state, and we, consequently, were unwilling to assume, unsustained, the responsibility; and, therefore, another physician (Professor Richardson,) was called in consultation, who decided that the plan of treatment which we had laid down was correct, and that had it been pursued, the difficulties now to be contended with would not, in all probability, have been brought into existence. By us the case was treated in conjunction. Although for the two first weeks calomel had been given, it was given at irregular intervals and in inefficient doses. The stools were infrequent, watery and inodorous. The first three days of the third week he took fifteen grains of calomel every three hours;—no alteration in the alvine dejections. The next three days fifteen grains every two hours;—stools brown, copious, less fluid but inodorous. No obvious improvement in the disease, although it was apparent that it was not exasperating. Next three days twenty grains were given every six hours;—stools copious, dark, consistent and very fœtid. Improvement was now manifest; heat of skin declined—thirst abated—pulse slower and fuller, and tongue moist. During the ensuing week, he took from twenty to forty grains of calomel, *per diem*, under the influence of which the stools became natural in color and nearly of the natural consistence.

In this case it was manifest, not only from the symptoms in general, but from the character of the stools in particular, that the liver was the suffering organ. To restore it to proper action was, therefore, the leading indication, and to fulfil it no difference of opinion could exist, amongst rational men, in regard to the remedy that should be used. From the brief sketch of the case above given, the reader will observe that although the disease did not become aggravated during the passage of dark, liquid and inodorous stools, it experienced no decided amendment, and that this did not take place until after they had become less liquid and more offensive, and that then it was so manifest as to give rise to rapid convalescence.

Many cases very similar in character might be adduced, from the observation of the phenomena of which we have deduced the conclusion that when the evacuations are destitute of odor, it is an infallible indication that the action of the liver is inefficient and perverted, but not necessarily suspended, for it often happens that the contents of the bowels are colored by a matter that evidently comes from the liver, but which does not consist of the biliary elements in that state which favors their decomposition, and consequently, no odor is exhaled. This being the case, we cannot insist too strongly on the importance of an energetic use of such means as are relied on to reform perverted biliary action in all those diseases in which the alvine dejections are observed to be destitute of odor, or to exhale one that is preternatural in its character. Inattention to this indication, we have frequently had reason to believe, was the cause of the most disastrous results. Physicians, without closely studying and thoroughly understanding the nature and meaning of stools, are too much in the habit of considering any dark hue as proof of biliary action. This is generally true in reference to mere action, but it is not of itself any evidence of proper action, for unless the biliary secretion causes the stools to be fœtid, no improvement will take place while this invariably happens when it does. Now, under the impression that liquid and dark stools, although destitute of odor, satisfactorily prove that the liver has resumed its duty, the use of those means that are known to act with great power on that organ, is suspended at the very time when it should be fearlessly enforced, and consequently patients have been permitted to die, that might, under more judicious management, have been saved.

In disease the alvine evacuations often cause a hot or smarting sensation during their passage *per anum.* This sensation, sometimes, is so intense as to be very painful, and the contents of the bowels are, often, so acrid as to produce excoriation. This acridness has been ascribed to the medicines that are employed. This is true, but not in the way that it is commonly explained. It is supposed that the acrid and drastic qualities of certain medicines give rise to the pain and excoriation just spoken of. Our observation lends no support to this opinion. Unless the lower part of the intestinal tube is irritated or inflamed, as is the case in dysentery, we know of no medicine that renders the contents of the bowels acrid, except those that are known to possess the power of invigorating the action of the liver: nor do we ever find the stools acrid, except when there is unequivocal proof of abundant biliary secretion. Then they produce heat, smarting and sometimes excoriation. Such sensations are never experienced in those states of the diseased system which are distinguished by the unequivocal evidences of an inert liver; and, therefore, they may be fairly attributed to an unobstructed condition of that organ.

During the progress of disease the stools are observed to be nearly colorless, liquid and inodorous, without being acrid; dark, liquid and inodorous, without being acrid; dark, somewhat consistent and inodorous, without being acrid; dark, consistent and odorous, without being acrid, but very fœtid stools are apt to be acrid. An inodorous stool is never acrid. When they are acrid, they cease to be liquid—are very dark and often black, and always offensive. When, therefore, the contents of the bowels cause a burning or smarting sensation, it may be regarded as satisfactory evidence that the liver is acting freely; that bile is being poured into the bowels in a very concentrated state; that a secretion is being formed, having all the healthy qualities of bile in excess.

Acrid, consistent and offensive stools, although they may extort from the patient indications of suffering, are always of favorable omen, for we have never failed to see them the cause or concomitant of rapid and decided improvement. The apprehensions, therefore, with which the minds of some physicians are haunted, on account of such evacuations, are wholly unfounded.

As has been already intimated, the first secretion that comes

from a liver that has been in an inert state, is never healthy in its character. While it gives more or less of positive proof that it has been formed by the liver, its peculiarities are such as to denote decided vitiation. This fact must not be overlooked or misapprehended, as it would inevitably lead to a suspension of such means as are considered proper, or at least to such a diminution of the quantity of them used as would prove entirely inadequate to the attainment of the end in view. The first biliary secretion that makes its appearance after the liver has been torpid, although always vitiated, presents no uniformity of character. Very frequently it is observed to be liquid and of a coffee brown or mud color; sometimes it is very dark and even black, and uniformly it is very liquid. This is the most invariable property of such stools as are made up, in part, of the kind of biliary secretion under consideration. We have never seen them present any thing like the proper consistence; nor do they scarcely ever exhale any odor. We have observed them to give out, in a few instances, a faintish and sickly smell, but never any thing that could be taken for their natural offensiveness. Liquidity and inodorousness generally go together, and when one of them disappears, we shall soon cease to observe the other. According to our experience, they generally become fœtid before their consistence is increased. We have frequently seen stools, such as we have just described, and which are characterized by the first secretion that is poured out by a liver that has been torpid, obstinately continue, with but little alteration, for the space of ten days or a fortnight, and that, too, under the daily use of very decided quantities of calomel.

The stools of which we are now speaking, pass without producing any of those painful sensations that have been ascribed to their acridness; they exhibit nothing of this quality so long as they continue liquid and inodorous. On this subject Dr. Faithhorn seems to have very inaccurately observed. He remarks:

"I very often, in the course of my experience, have had occasion to remark, that the biliary secretion has for some days shown itself extremely vitiated, and then, for many days after, none whatever could be discovered. In these cases, we should not rest satisfied until the liver is enlivened and acted on, in such a way as to shew some steadiness of principle; at other times, I have observed, the contents of the bowels will often resemble mud, or a matter of that well-known darkish color: and wherever I have seen this sort of dejection unalterably

continue for some time, the case generally has assumed a stubbornness of character, and has required the excitement of considerable energy, in order to rouse the lethargic liver to its pristine functions.

"Under such circumstances, it has generally been a symptom of direct benefit, when my patient has complained of some glowing, or diffused heat, in the region of the bowels, attended with a nipping and griping effect, which symptom recurring two or three times a day, leads me to augur favorably of such an occurrence, as it convinces me that bile, in no sparing quantity, is poured into the intestines; and I have scarcely ever been deceived, in finding the excretions at such seasons amply provided with this fluid. Should this diffused heat and griping continue for a week at intervals, it has uniformly afforded me firm grounds for a favorable prognostic, as to the speedy issue and recovery of the patient.

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"When bile passes the intestines in any quantity, in those constitutions which have been deprived of it for any length of time, (I mean in those instances where the quantity previously has been so scanty, or the quality so dilute, as by no means to render to the bowels that due physical assistance required;) I have invariably found it to occasion considerable burning heat at the rectum, like the sensation caused by some scalding fluid, which generally lasts some minutes; and, previous to the discharge, those gripings and glowing heats over the bowels, already noticed, usually take place as the forerunners of it; a strong proof of its acrid and caustic nature, acquired from long and protracted retention."

The symptoms here signalized, that is, the 'nipping and griping'—'the gripings and glowing heats over the bowels,' together with the 'burning heat at the rectum,' are never produced, according to our experience, by the passage through the bowels or *per anum* of thin, dark and inodorous stools. We have been led to believe that those sensations are the result, almost exclusively, of an overflux of a very concentrated bile—of a secretion that imparts to the stools consistence—renders them nearly or quite black, and causes them to exhale an odor which, though the same, fundamentally, as that which is observed in health, is much more intense in its character. Attentive observation will soon convince the practitioner of the truth of this statement. For many days in succession, he will see thin, dark and inodorous stools pass, without occasioning the patient the slightest inconvenience, but so soon as he observes them becoming consistent and fœtid, he will find the patient complaining in the manner described by Dr. Faithhorn.

The resumption on the part of the dejections of consistence and smell, is generally gradual, and these occurrences almost uni-

formly precede their becoming acrid; in a few cases, however, we have seen them take place suddenly, and then their appearance is usually forerun by 'gripings and glowing heats of the bowels.' Generally, therefore, the return of fœtor enables us to foretell those symptoms which result from acridness, and when we have witnessed the griping and diffused heat of the bowels, in those cases in which the stools had not yet become somewhat consistent and offensive, we have been enabled to predict a speedy alteration in them for the better. Nor is it unworthy of remark, that this conclusion is as much a deduction from the improvement that is observed in the general condition of the patient, as from the sensations that are felt in the bowels. Stools that are acrid evidently differ very much in nature from those that are thin and without smell, and to this difference we should attribute the heat and griping spoken of. The general improvement which is often observed to be a concomitant of them, and sometimes to precede their passage, is strong corroborative proof that the matter of which they consist, comes from the liver, and not from the bowels, as some suppose. If they result from intestinal irritation, their acrid nature should offend the morbidly excited sensibility of the bowels, and thus exasperate the symptoms; but such evacuations are never followed by any such unfortunate result, and the only rational way in which the amelioration that is sometimes obvious, even before acrid stools have been passed, can be explained, is by referring it to the restoration of the vital powers of the biliary canals, in virtue of which the refuse matter of the portal circulation is not only rapidly eliminated, but it is elaborated into a very concentrated bile, which, when it enters the bowels, gives rise to sensations of heat, griping, nausea, and sometimes fainting.

Nothing is more commonly observed, after stools have been for several days thin, dark and slightly, or not at all odorous, and are about to become consistent and offensive, than slight griping pains and sensations of glowing heat being diffused through the abdominal viscera. In several instances, we have seen nausea, and in one fainting, which could not be ascribed, with propriety, to any other cause than to an abundant afflux of concentrated bile into the bowels. This view of the subject seemed to be sustained by the fact, that more consistent and offensive stools were soon passed, and the patients were at once relieved of every unpleas-

ant sensation. That syncope may be produced by the cause here supposed, we think may be inferred from the following case: We had under our care a child two years of age, who was laboring under Cholera Infantum. By the use of calomel and prepared chalk, the evacuations, from being thin and colorless, and without smell, soon became dark, but they continued for several days to be as liquid and inodorous as ever. Calomel and the adjuvant just mentioned, were persevered in, and at last the little girl became very languid and pale; and that she was much nauseated, was proved by the ineffectual attempts to vomit that were made. In this state she continued about two hours, when, upon raising her head, she fainted. This produced much alarm, and although we were at her side in less than half an hour, having hurried there to see her dead or dying, our surprise may be well imagined, when we found her inconceivably better than when we last saw her. Her languor had gone off—her pallor of countenance had, in a great degree, disappeared—her eyes were animated with a new and lively expression, and she was sitting in the arms of her nurse sipping chicken-water. On inquiring what had happened, to produce this sudden and unexpected change, we learned that she had passed from her bowels more than a tea-cup full of dark, consistent and offensive matter. From that moment improvement was rapid, and in a few days she was entirely well.

Though some writers think otherwise, we venture to say that, in general, dark evacuations are of favorable import—that is, the danger to be apprehended, is not so great as when they are destitute of color; for while the former indicates that the liver is acting, though pervertedly, the latter shows that it is inert, and experience has repeatedly testified to the fact, that it is much easier to correct perverted action of the liver, than it is to arouse it to proper exertion when in a torpid state. Though this is true, it is equally true, as we have frequently intimated, that for a decidedly favorable conclusion to be deduced from the stools, it is necessary that they should be of a black or dark green color—have some consistence, and exhale an odor which, though feeble, should not be preternatural. Such dejections may soon be made, under proper treatment, to assume nearly a normal character.

Dr. Armstrong, in his remarks on Dysentery, in speaking of some of the circumstances of evil import, says that, "Besides this

unfavorable conjunction of symptoms, the stools were occasionally of a very black color, which is always untoward in cases of dysenteric disease." The reader who recollects the alarm which such an operation produced in the mind of Dr. Johnson, while in India, and also the perfect tranquillity and freedom from pain which succeeded it, will not be surprised at the allegation of Dr. Armstromg, nor unable to appreciate its value. There are black stools, we admit, that are of evil omen; such, for example, as those that are tarry or pitchy, or black, thin and grumous; but to say that black dejections, in general, are unfavorable, is to make a declaration that experience and observation have not confirmed. In dysentery, the disease to which Dr. Armstrong has particular reference, our experience goes to show that black stools, that have some consistence, are not admixed with a large amount of mucus, are somewhat offensive and copious, never fail to be followed by improvement, inasmuch as they indicate an active state of the liver, for such evacuations can come from no other source.

Many other varieties of stool exist, and might be dwelt upon with advantage, but as those that have been considered, are of most common occurrence, and are met with at some stage or other of nearly all summer and autumnal diseases, we will not, at present, at least, trouble our readers farther on the subject, than to point out to them what we suppose to be the successive steps that are taken to restore a torpid liver to an active and a healthy state. The reader will refer to what has been said of the vital properties of the absorbent vessels, to which order of vessels we consider the biliary canals as strictly belonging. These are absorption, organic affinity and elaboration. It is familiarly known to all physiologists that, in the extinction of life, absorption is the last act that is performed; and it is a fact equally incontestible, that when a secretion has been suppressed, the first act of restoration is absorption. Now, in the case of torpor of the liver, it is evident that before the effete matter can be elaborated into bile, it must be absorbed from the portal circulation. That mere absorption recommences before the biliary canals recover their organic affinity, is proved by the vitiated character of the biliary secretion, as illustrated by the dejections, which are often, for days, a thin, blackish and an inodorous fluid. This can only result from those vessels being called on to act upon improper materials; or,

if proper, from their inability to produce in them the proper change. The stools to which we refer, may be the effect of the conjoint agency of both causes, but when we reflect that mere absorption is the last act that is performed, when a secretion is arrested, and the first that of necessity takes place when it is again started, together with the fact, that from some cause, the secretion of the liver soon improves in its character, we shall not hesitate to believe that the thin, blackish and inodorous stools, are owing to indiscriminate absorption. The close observer will remark, that such evacuations soon become, from being almost as liquid as water, nearly of the consistence of molasses, without cognizable odor; or if it is present, in any degree, it is not of the natural character. This change we refer to the restoration of organic affinity, by which the refuse matter of the portal circulation is discriminated, and to the partial resumption of the elaborative power of the biliary canals, in virtue of which a change is wrought on the materials selected and absorbed, but not such a change as is sufficient to convert them into healthy bile. After a time, in cases that terminate favorably, the biliary secretion, as indicated by the stools, improves, for they become more consistent—of a black or a very deep green color—odorous, and in many instances, acrid. This is the most auspicious change that is observed in the alvine evacuations, in cases where there has been torpor or perverted action of the liver, as we then never fail to see the most gratifying amendment of all the symptoms. This we refer to the restoration of all the vital properties of the biliary canals, and it would seem, from the amount of bile poured out, and the concentrated state in which it is poured out, under such circumstances, that they then perform their respective offices with great activity. Whether the conjecture we have thrown out, be tenable or not, we shall not pretend to determine, but there is one fact which all observers will admit, that renders it, in a high degree, probable; which is, that the liver, at the time to which we refer, performs its functions with uncommon energy. That it is being performed, too, in a proper manner, is proved by the fact that the stools, instead of becoming more and more morbid in character, hourly improve until finally they become normal.

The order in which we suppose the vital properties are resumed by the biliary canals, can hardly be regarded as strictly hypothet-

ical, inasmuch as it corresponds with the successive changes that take place in the stools in those cases of disease in which the liver has been torpid, but has been rendered active, and also because it leads the physician to enforce a proper course of treatment. It is almost certain that when the functions of an organ have been, from any cause, suspended for a time and are again resumed, that they will not be, at first, performed with the perfection that they are in health. The secretion that is poured out will be vitiated. This is most unquestionably the case in regard to the liver, and from not knowing or attending to this important fact, the vaguest notions have been acted on in practice. Although we find in books very various attempts made to account for black stools, without ascribing them to the liver, we are constantly meeting with physicians who regard every dark colored discharge not only as coming from the liver, but as evidence that that organ is performing its duty in a proper manner. This is a very great error, and from this cause springs much of the mortality from fever. Under the preposterous impression that the liver is performing its duty, the proper treatment is discontinued, or so abated as to prove ineffectual, and the patient dies. Two remarkable instances of this kind are now fresh in my recollection, both of which occurred, a few years ago, in Woodford county, Kentucky. A gentleman had been suffering from fever several days when we were called in consultation. When we arrived, his skin was yellow and his stools thin and almost colorless. There was evidently torpor of the liver. Calomel and purgative adjuvants were given, and in three days his stools had become quite consistent, very dark, and they began to smell. This was considered sufficient by the attending physician; the treatment was discontinued, and saline medicines, in small but repeated doses, were given. In a very few hours the liver ceased to act; the stools became watery, nearly colorless, and very frequent. Every subsequent attempt to awaken the liver from its torpor was ineffectual, and he died about forty-eight hours after the discontinuance of mercurials. In the other case, mercurials had been used for several days before we saw the patient, and the stools had become somewhat consistent; they were of a dark, mud color, but inodorous. We urged the necessity of mercury on the ground that though the liver was acting, it was acting pervertedly and inefficiently,

and that if it was not persevered in, the stools would soon declare a torpid state of the liver which medicine could not remove. Our views did not prevail;—it was contended that the liver was active enough, and that sufficient mercury had been given. In a few days the patient died, and in such circumstances, under such treatment, nineteen in every twenty will share his fate.

No one can doubt, whatever may be his theoretical opinions, that it is excessively important to know what constitutes proper biliary action; and no matter what may be our mode of treatment, it is equally important to know that it may and should be persevered in, until normal functional power is restored to the liver. Whether or not we undertake to accomplish this by mercury, it is absolutely certain that it must be accomplished, or death cannot be averted: at least, this is the result of fifteen years experience and observation.

Let the physician, therefore, closely examine the stools, and to derive the greatest possible advantage from this, let each successive operation be received in a different vessel; let him mark the changes they undergo, until they assume a particular character, and let him ascribe those changes to the gradual and successive restoration of the vital properties of the biliary canals, and he will be enabled to determine with what energy to push the treatment—when its force should be increased or diminished, and when it should be discontinued. This is absolutely indispensable, should his anchor of hope consist of any of the preparations of mercury. They are more certain and effectual—more safe when properly managed, and more certainly destructive than any other remedies, in injudicious hands, or when their use is not guided by fixed principles.

We close this Essay with the request that those who may honor it with a perusal, will refer to our '*Note on the use of Cathartics in the Treatment of Bilious Fever*,' which is to be found in the first number of this Journal. This we the more earnestly desire, as we are specially solicitous not to be considered exclusive in our pathological or therapeutical principles, which, perhaps, the reader would be inclined to infer, were he unacquainted with the explicit qualifications contained in the *note* alluded to.

CASES OF, AND REFLECTIONS ON, NÆVI MATERNI.

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The subject of *Nævus Maternus* has enlisted the feelings and challenged the attention of people in general, but of physicians in particular, from time immemorial, and it has but just happened that the yoke of ancient authority is so far shaken off, that the latter have ventured to conjecture that its numerous varieties are not owing to the influence of the maternal imagination. Although the absurdity of this opinion should have appeared sufficiently apparent to all enlightened minds, ages ago, it is surprising to find many intelligent physicians who still adhere to it with the most obstinate pertinacity. This being the case amongst physicians, it is not at all a matter of astonishment that it should still keep possession of the female mind, and, consequently, be a source of great anxiety and solicitude. So much so, indeed, is this the case with many gravid females, that, after having seen frightful or repulsive objects, the whole remaining period of gestation is spent in painful, but groundless, apprehension.

The more successfully to expose the fallacy of the opinion to which reference has been made, we deem it proper to say, that we consider the phrase Nævi Materni as embracing, in the first place, every departure from nature in color or texture; secondly, elevations on the surface of the body or its membranes; thirdly, all defects of structure; fourthly, all derangements or distortions of members; fifthly, all duplex or multiplex parts, constituting monstrosity; and lastly, erro loci or displacement of parts.

Though the above preternatural deviations have been illustrated in numerous instances, and therefore, must be admitted the opinion that ascribes them to the maternal imagination, should be rejected, and that for many reasons, but if for no other, the following: The fœtus in utero is enveloped in a soft membranous sack, and is suspended in a fluid, one of the purposes of which is, doubtless, to protect it, as effectually as possible, from the injuries that might be otherwise inflicted on it by external violence. With the mother, it has no direct connexion, except through the medium of a deciduous membrane, in which no nerves have been found.

This being incontestible, the idea of the maternal imagination, or of any change produced in the nervous system, being capable of physically influencing the fœtus in utero, must be regarded as preposterous. Many of the congenital peculiarities observed in children, so far from resulting from the cause just adverted to, are the obvious effects of simple mechanical pressure, as the following cases, we believe, will illustrate and prove.

About twenty years ago, we were present at the birth of a child that was perfect in all its parts, with the exception of the little finger of the right hand, which was wanting. The stump appeared as if the finger had been smoothly amputated about the middle of the third phalanx. On a more minute examination, to our surprise, we found that there was suspended to the middle of the third phalanx of the little finger of the left hand, by a filament or cord, two phalanges and a half of a finger, perfect in size and form, even to the nail, the counterpart of the one that appeared to have been lost by the left hand. This pendulous portion of finger on the right, would have perfectly supplied the deficiency on the left, and is a case of erro loci, or displacement of parts.

This is certainly a very curious case, and merits a moment's attentive consideration. The pendulous portion of finger, was that which properly belonged to the right hand, or it was not. If it is concluded that it was not, then the case was a *lusus naturæ*, wholly inexplicable, on any ascertained principle. If it did belong to the right hand, it had or had not been attached to it. If it had never been attached, we have no right to say that it belonged to it, and, therefore, it must be considered a freak of nature. But if it had ever been, at any time, attached, and this seems to be the only rational view of the case that can be taken, there was a time when its detachment was effected. If this inference be authorized, we would ask, how could the maternal imagination have achieved its amputation and its transfer and attachment to a preternatural part of the body? With this hypothesis, the leading features of the case are wholly and palpably irreconcilable; and if we would give any thing like a satisfactory elucidation of them, we must have recourse to some other and very different principle. We would suggest mechanical pressure, as the cause of amputation, and if we reflect that early in intra-uterine life, the fœtus is gelatinous, this idea will not seem improbable.

During that period, slight pressure would suffice to divide and detach parts. The posture usually assumed by the fœtus in utero, is such, precisely, as favors this explanation of the phenomenon under review. The spine is curved—the head and knees are folded on the breast—the feet rest upon the gluteii muscles, and the arms are often so arranged as to embrace the legs, while the hands cross each other just above the ancles. In this posture the third joints of the little fingers cross each other precisely at the point of detachment. In this case, therefore, we have only to suppose that, from some cause, the little fingers, at the point of junction, became abraded: this would render adhesion very probable. The progressive enlargement of the fœtus would necessarily produce distension of the adhering parts, in which state it is easy to conceive that any sudden motion of the fœtus or of the mother, might have caused the detachment of a portion of one little finger, while it remained hanging to the other, in the manner above mentioned.

A few years since, we were required to visit a Mrs. W., who, after a tedious and very painful labor, was delivered of a still-born child, which was perfect in every respect, with the exception of a portion of the bones of the head. The superior part of the occipital, as well as the posterior and inferior portions of the parietal bones, together with the external soft parts, were wanting, to the extent of two by three inches, forming a deep and ugly fissure with callous edges. This deficiency of parts exhibited a striking resemblance to some of the worst cases of hare-lip. The head was larger than common. On an inquiry into the history of her pregnancy, we ascertained that she was a weaver, and that she had persevered in her business during the whole period of gestation—that while engaged in this species of work, the most protuberant part of the abdomen was generally forcibly pressed against what is called the '*breast beam of the loom*'—that this often caused such severe pain as to oblige her, repeatedly, to discontinue her work. In this fact we are of opinion we find a satisfactory explanation of the great deficiency of bone and integument that was observed in this case. Mechanical pressure had, doubtless, caused the absorption of the parts that were wanting. To ascribe their removal, supposing they ever existed, to the maternal imagination, would be absurd.

The 18th of November, 1829, we delivered a Mrs. G. of a son, the body of whom was healthy in appearance, but our attention was arrested by the absence of both of the inferior extremities. The right leg had the appearance of having been amputated just above the knee-joint, while the left terminated just below that joint. There was a portion of skin of a cord-like form, attached to, or rather hanging from, the left stump, while the end of the right thigh-bone protruded through the soft parts more than half an inch, and it was in a denuded, black and decaying state. The stumps were otherwise smooth and healthy, and exhibited the appearance of having been neatly amputated. During labor, the stumps presented; and their unusual form caused much embarrassment in our mind as to the precise nature of the case. Early in the labor, the cord could be felt, and as it pulsated, we, of course, concluded that the child was alive, but afterwards it must have become strangulated, as it was still-born.

Inquiring into the history of this woman's pregnancy, we learned that, about six weeks before, she had fallen from a considerable height side-wise across the back of a chair. The concussion was so great that she was rendered insensible; and, although she recovered from it, the remainder of her pregnancy was spent in a weakly, faintish and uncertain state. From the time of the fall, uterine motion was tremulous and unnatural, although it increased in force and frequency as the termination of gestation approached. May we not rationally suppose that the deficiency of parts in this case, was owing to the circulation in them having been cut off by the violence of the fall? If so, their vitality must have been extinguished, and they would be, consequently, at once submitted to the solvent power of the liquor amnii, which, if it possesses it to any extent, would account for the disappearance of the wanting portions of the legs.

In relation to those congenital peculiarities which consist in distortions, and which embrace cases of club-foot, as well as facial deformities, that are often singular and surprising in their character, and in which the imaginative gossip fancies she finds the features of the monkey, lion, dog, &c., we would merely remark, of club-foot in particular, that we believe that in every instance, it is obviously attributable to the position occupied by the fœtus in the uterus, together with the manner in which the limbs are entan-

gled in the umbilical cord. In every instance of club-foot that we have witnessed, it has been connected, to a greater or lesser extent, with such entanglement; the cord has invariably been found drawn tight over the extreme parts of the feet, which, it is easy to conceive, may give them, during growth, that peculiar twist called club-foot, and which so often, from neglect or ignorance, continues through life.

We succeeded in delivering Mrs. M., after a lingering labor. The liquor amnii, in this case, had been discharged, and perhaps had been for some time prior to the actual commencement of parturition. In consequence of this circumstance, the uterus had been, for a considerable length of time, closely contracted on the fœtus, and that, too, to such an extent as to deprive it, in a great degree, of the power of motion. The umbilical cord, which was of the ordinary length, passed from the umbilicus over the pubis, between the legs, and then upwards along the spine to the neck, around which it passed twice. These various convolutions occupied so completely the whole extent of the cord, that it must have been, all the time, in a state of considerable tension. In passing over the sacrum, the cord had embraced both feet and forced them so from their natural position, that the soles of both feet rested on the gluteii muscles, with the toes of each foot converging towards the superior part of the sacrum; not exactly in juxta-position, but so arranged that the great toe of one foot passed some distance beyond the little toe of the other. In this preternatural and constrained position, they had been strictly confined during the greater part of gestation. The consequence was, that both feet had become so deformed and twisted as to constitute what is called club-foot. The legs were bowed—an indentation produced by the feet, was obvious on the buttocks, and it remained visible several days. The muscles of the legs, from confinement in one position, had become so fixed that when the child was permitted to assume any position it pleased, it continued, until it was three weeks of age, to place its legs in precisely the position they occupied before birth. These facts give a plain intimation of the cause of the deformity of the feet.

In illustration of deformities or distortions of the features of the face, we wish to record the following case, which occurred some years ago, under our observation. We delivered Mrs. B. of a

dead child on the 6th December, 1830. In this case, the cervical vertebræ were anchilosed—their processes destroyed—the flesh upon the back and neck much shrunken—hard to the touch, and of a chesnut color. The head was drawn backwards—the neck was rigidly stiff and unyielding. There appeared to have been, some time before birth, an arrest of development of the posterior part of the head, while the anterior continued to grow. The development of the posterior part of the head having been arrested and drawn back, so threw the features of the face out of their natural position, that the eyes, nose, etc. had the appearance of being placed on the top of the head. So frightful was the deformity, in this case, that the imagination might have fancied in it a likeness to almost any thing that is repulsive in nature.

In this case, like those previously related, the cause, we believe, was mechanical. The mother had, in subserviency to a fashion which entails untold evils on the sex, worn, through her whole pregnancy, very stiff corsets, that were drawn as tight as possible.

In relation to twins, we wish to give an account of a case that occurred in our practice, simply because of its singularity, and not with the view of suggesting any explanation of it. On the 30th of August, 1829, Mrs. D. was delivered of twins, both of which were females. These were almost precisely of the very remarkable character that was presented by the Siamese twins. The resemblance, however, was not complete. In the latter, the attachment was by ligamentous or fleshy matter, while in the former, it was osseous. The inferior extremity of the breast-bone of each of them curved outwardly until they met, at which point they were firmly united. Besides this osseous union, the common integuments and muscles, to within a brief space of the umbilicus, bound the twins together. There was but one cord which instead of bifurcating so as to connect the placenta with both children, was inserted into only one of them at or near the proper point. For the space of three inches around the point of insertion of the cord the common integuments were absent. From what could be learned by an external exploration, it was concluded that the bowels of both children were contained in one common sac or cavity. Although it would seem from the facts, that their was but one placenta, one cord, and this inserted into but one child, the vascular system must have been common to both; and

yet, there was reason to think that the circulation in them was in some degree independent. Respiration was fairly established in both of them, but one died thirty hours after the other—the first living only twenty-four hours. On the right hand of one of the children, there were two thumbs.

The Siamese twins visited the section of country in which Mrs. D. lived, but the season after the birth of her twins. This was a fortunate circumstance, for had it been the season before, it would have been regarded by many as a conclusive, and by all a stubborn fact, in support of the influence of the maternal imagination on the fœtus in utero.

NOTES ON THE USE OF THE DATURA STRAMONIUM.

BY ROBERT E. LITTLE, M. D., OF RICHMOND, KY.

ONE of the ways in which a physician may render himself useful to society, is by making known such facts and observations as may add to the general stock of knowledge, and thus contribute to the information of others. The recording of facts has done more for the advancement of the science of medicine than all the nicely woven webs of the fanciful, and too often deluded theorist, to which the press has ever given publicity. By this remark, I do not mean to undervalue the importance of theory when based upon facts, but only when it goes in quest of them. Men find it much easier to speculate upon than to observe the operations of nature, and, as a consequence, they are almost certain to be captivated with some pleasing and delusive fancy which when reduced to practice, they are compelled to abandon because of its absurdity and consequent inutility. There is no short road to knowledge. Observations on the diseased living and examinations of the dead body are the only sources of knowledge: when these are disregarded, our deductions are of course attended with uncertainty, or however true, are wanting in proof, and fail to convince because they have proceeded from postulutory principles. Every day we see how simple facts, drawn from the store-house of nature, are dissipating those pleasing sophisms which have germinated in every age and flourished in every soil. Theory without practice is a bubble, formed

to allure the fancy and disappoint our hopes; while practice without the aid and light of science, partakes of the grossest impudence and empyricism. The great temple of medicine, if it ever rests upon a firm foundation, can be built upon the observations only of the rational theorist and judicious practicalist.

It has often been remarked, that every climate produces remedial agents sufficiently powerful to combat, successfully, all the diseases that are incident to it. Whether this be true or not, there are hundreds of plants indigenous to our country, the virtues of which are known to be of the highest order in the cure of diseases, and doubtless there are many others of equal, if not superior efficacy, which are but little known, or if known, they are not properly appreciated. In this class, the Datura Stramonium holds a prominent place; and although it is not as applicable to as many forms of disease as some others of less active properties, yet its superior powers in the relief of some of the most distressing maladies to which the human frame is liable, renders it a remedy of vast importance to the practitioner. From the time of Dr. Stork, who was the first physician to recommend its use, it has enjoyed a considerable, but fluctuating, reputation, for its curative virtues in epilepsy and other kindred diseases. Like all other remedies, it has had its friends, who warmly praised it—affirming that no remedy possessed virtues equal to it in the cure of these diseases, and that it is applicable to almost every case; while on the other hand, there are those who have been as violent in their denunciation of it, maintaining that they had never seen the slightest benefit result from its use, but, on the contrary, oftentimes manifest harm. How are we to reconcile such different and contradictory statements? The medicine has had friends and supporters, of the highest respectability, in the profession. This precludes the idea of any thing like deception being practised, and it can only be accounted for, by supposing that there are cases to which it is inapplicable, or there may possibly have been preconceived opinions as to its virtues; for how often do we see experiments instituted, either to oppose or support an opinion, give different and contradictory results, or the results be misapplied or mistaken. In the relation of experiments with medicines, all the circumstances connected with their use should be minutely stated, for upon these oftentimes depends the success or failure of a med-

icine. By this means the detection of error is easy, for if, upon account of the respectability of certain men, we put an almost implicit confidence in every thing they advance, as truth, and such men be liable to error, we follow them in their errors without rightly appreciating their merits, while on the contrary, our confidence increases greatly when, after a thorough revision and investigation, we find them to be correct.

The first case in which the writer knows the Datura to have been used, was that of a young lady, aged about 20 years, of nervous temperament, who was then, and had been, the subject of epileptic convulsions, for about the space of 10 years. The paroxysms came on once a month and usually continued for half an hour—sometimes even longer. She had been under the care of several eminent physicians, who had exhausted all the means in their power, which they thought would be of service in such a case. Bloodletting, purgatives, counter irritants, tonics, &c., had all been used, but without, in the least, benefitting her. Her mind at this time was considerably impaired, from the violence and long continuance of the disease. She, as well as her friends, had almost lost all hope of recovery, when it was determined to make one more effort to relieve her from her distressing affliction. The treatment of her case was commenced by the administration of several mild purgatives, and after their operation was over, the extract of Stramonium was given her in doses of half a grain twice a day, which, in a short time, produced its usual specific effects, such as vertigo, nausea, slight dilatation of the pupil, diuresis, &c. The usual time for the recurrence of the paroxysm passed off without any recurrence of the disease. She continued the use of the Stramonium for about four months, without any symptom of an attack, when, thinking herself permanently cured, she discontinued its use; but, in a short time, the disease returned, not, however, with so much violence as formerly. Upon resuming its use, the disease again disappeared. She often left it off, and, as a consequence, the *fits* returned, but were always driven off by a resumption of the Stramonium.

In the above case, the Stramonium was alone useful in warding off attacks of the disease and mitigating its paroxysms, not being able, as was first anticipated, to entirely remove the cause of the disease, whatever it might have been.

In another case, of a man of leuco-phelgmatic habit of body, aged 35 years, the extract was prescribed in half grain doses, in conjunction with periodical bloodletting, purgatives, attention to diet, &c. This course of treatment was pursued for several months, without an attack of the disease, but it returned in about 13 months afterwards. The same course was again pursued and the disease was again arrested. The patient continues well up to this time, which is some two years since its second disappearance. A question may possibly arise in the minds of some, whether the Stramonium, or the other remedies used in conjunction with it, produced the good effects in this man's case. From the failure of the constitutional remedies in the hands of a highly respectable practitioner, we are inclined to attribute the cure to the use of the Stramonium. Two important facts were learned during the treatment of this man's case, in relation to the administration of this remedy. One is, that much smaller doses produce the specific effects in persons of an irritable habit, than is required to produce the same result in persons of an opposite habit of body. The other is, that patients do not bear an increase in the dose of Stramonium, to the same extent that they do of other narcotics. In the above cases the Stramonium was used for several months in succession, and the dose never could be increased more than ⅛ or ¼ gr. without causing disagreeable consequences.

The above cases are the only ones in which the writer knows the Stramonium to have been used in this disease; but from its success in mitigating the paroxysms in one case, and relieving entirely the other, he is induced to believe that this remedy has been too much neglected. The writer does not pretend to say that, in all cases, it would be as beneficial as in those above related, but on the contrary, he believes that its use, in some instances, would be attended with ill consequences, particularly in persons of a full, robust habit of body; here the administration of the Stramonium should be preceded by ample depletory measures.

A negro woman residing in this village, was formerly the subject of occasional attacks of spasmodic asthma; the paroxysms generally came on during the night, and the first notice of the approach of an attack which she had, was a sense of suffocation, with tightness and stricture across the chest. The difficulty of breathing would continue to increase for some time, then inspira-

tion and expiration would be performed with difficulty, slowly and with a wheezing noise. Coughing would now succeed, and the patient would seem to be threatened with immediate death, by suffocation. These symptoms generally continued for eight or ten hours, when an expectoration of mucus would take place, and the patient be relieved for several weeks. The woman was treated with bloodletting, anti-spasmodics, &c. This course of treatment was attended with but slight mitigation of the symptoms. From the long continuance of the disease, she became much emaciated; so much so, indeed, that she was unable to arise from her bed unless assisted. At this stage of the disease, she was directed to inhale the smoke arising from Stramonium roots, in the process of of burning; she did so, and, as a consequence, suffered but little inconvenience during the next paroxysm. She is now in the habit of occasionally smoking the Stramonium, and when, by any imprudence or excess in eating, she experiences an attack, which is but seldom, it is always very mild. She has now entirely regained her strength, and enjoys, comparatively, a good state of health.

This article, as an anodyne, in some cases, is certainly preferable to opium; for opium, on account of its heating and stimulating qualities, is often inadmissible where there is pain, attended with a peculiar irritation of the nervous system. These qualities, in opium, thus counteract the favorable anodyne effect which would otherwise be produced. So repugnant, indeed, is the nervous system to stimulation, in some cases, that even a moderate dose of opium cannot be employed without producing great confusion of mind, sometimes amounting to delirium. In such cases, it behooves us to make trial of other narcotics which possess the anodyne without any of the heating and stimulating qualities of opium. Trials have been made with the extract of Stramonium, and it has clearly produced all the effects of an anodyne and a sedative; it relieves pain, procures tranquillity and sleep, without inconvenience to the nervous system; the bowels are somewhat relaxed, and the secretion from the kidneys greatly increased. In one case of extreme nervous irritability and pain, tranquillity was unable to be procured by immense doses. The opium was discontinued, and the Stramonium substituted for it, in doses of ½ gr. every hour; after taking one and a half grains, the patient fell into a quiet, tranquil sleep, which lasted for seven or eight hours. He awakened free from all pain,

and with a total absence of that weariness, nausea, &c. which generally succeeds sleep procured by the use of opium. It is not pretended to offer Stramonium as a substitute for opium—by no means; for opium, on account of its general applicability, for the relief of pain, is to be preferred to any other article of the materia medica. But it is confidently believed that, in relieving pain, in cases where opium is inadmissible, from the idiosyncracy of the patient, the preference must be given to the Stramonium over all other narcotics which have been tried, and particularly in that kind of pain which depends upon, or is immediately connected with, spasms of the muscular fibre.

BIBLIOGRAPHICAL NOTICES.

Elements of Surgery.—By Robert Liston, Surgeon to the North London Hospital, Professor of Clinical Surgery, etc. etc. etc. From the Second London Edition, with copious *Notes and Additions*, by Samuel D. Gross, M. D., Professor of Surgery in the Louisville Medical Institute, etc. etc. Illustrated with numerous Engravings. Philadelphia: Barrington & Haswell, New York: J. & H. G. Langley. 1842. 8 vo., pp. 640.

While we return our thanks to the enterprising publishers for a copy of Liston's *Elements of Surgery*, we cannot decline frankly expressing the opinion that the medical public, at large, will feel greatly indebted to them for putting so valuable a treatise, on an important branch of the profession, within their reach. So thoroughly established is the character of Mr. Liston as a scientfic and experienced surgeon, and so properly are his great merits appreciated by those who are enlightened enough to think, and candid enough to say what they think, that it would be a work of decided super-erogation to detain the reader with a detail of his numerous unequivocal claims to his respect and consideration. Mr. Liston has seen much, thinks accurately, and speaks independently. Authority has not manacled his energies—

party has not blinded his perception—nor has prejudice biased his judgment. Unlike those who rarely venture beyond the purlieus of their libraries, and who know as little of disease, practically, as they do of a region that has never been explored, but who, nevertheless, write books that answer no other purpose but to leave the young practitioner in an inextricable labyrinth of doubt and uncertainty; he tells what he has seen, and guides those who have sagacity enough to follow, into the ways of professional respectability and great usefulness. We have already many treatises on the *Principles of Surgery*, but they, numerous as they are, and some of them of great value, have not superseded the necessity of such a work as the one before us. They, for the most part, are cumbrous or pedantic compilations which show much acquaintance with books, but give but little insight into practice, while in that of Mr. Liston, who is an accomplished surgeon extensively practised in the art, we find laid down such principles as personal observation has confirmed, and such remedial expedients recommended to the confidence of the inexperienced practitioner, as experience eulogizes as safe and proper. From a volume written by such a man, more really valuable practical instruction is to be derived than from all the books that were ever compiled. If the physician would profit as a practitioner by the study of books, he must have recourse to original writers—he must familiarize himself with their forms of expression—modes of thinking and motives of action, before he can judge with accuracy of their opinions, or come to anything like a close appreciation of the importance of their practice. He must be acquainted with an author through his own books, before he can understand him, or receive substantial instruction from his counsel and advice. Those who derive their knowledge from the reading of garbled extracts or isolated quotations, such as are found in most compilations, may speak learnedly, but they will never be able to think accurately or practice successfully. The reason of this is obvious. Compilers constitute a class of men greatly inferior to original writers, and, consequently, those whose minds are formed by the study of the works of the former, necessarily become careless and indifferent observers—loose and inaccurate thinkers, and feeble, vascillating and inefficient practitioners. Their instructors having had but little experience, it would be absurd to suppose them capable of teaching the art of observing

—having read much but thought little, it would be the grossest stupidity to believe that they could inspire a taste, or discipline the mind for close consecutive reflection—having heard much of the conflicting effects of remedies, without having had an opportunity, personally, to inquire into the cause of such discrepant results, it would be unreasonable to expect them to give any other than vague and unsatisfactory advice. Such works are amongst the most dangerous that can be put into the hands of the student, and decidedly the most uncertain guides that can be followed by the inexperienced practitioner. Such, however, in no respect, as the reader is already aware, is not the character of the volume of Mr. Liston—his *Elements*, together with the numerous *Notes and Additions* of Dr. Gross, many of which are valuable, though they do not strike us as being very original, will be welcomed by the profession as a great accession to its already voluminous, if not luminous, chirurgical resources.

Remarks on Medical Reform, in a letter addressed to the Rt. Hon. Sir James Graham, Bart., one of Her Majesty's Principal Secretaries of State, etc. By Sir James Clark, Bart., M. D., F. R. S., Physician in ordinary to the Queen and to Prince Albert. London: John Murray, Albemarle street. 1842, 8 vo., pp. 30.

We are thankful to Professor Paine, of New York, for his kindness in forwarding to us the very sensible remarks of Sir James Clark on *Medical Reform*. They are enlightened, and backed by his great reputation, they must produce great good in a country, like that of great Britain, in which the profession is so much embarrassed by antiquated customs.

The evils which have resulted from the habit of prosecuting medicine and surgery separately and distinctly are numerous, and have been long felt in England, and we are glad to see that there is a prospect of things being united, which have too long, but which should never have been divorced.

Sir James Clark remarks:

"In the evidence of some of the most distinguished physicians and surgeons of this country, before a Select Committee of the House of Commons, it was stated, and, I think, with perfect truth, that no surgeon could practice surgery successfully who was not acquainted with practical medicine, and that no man could be a good physician who was ignorant of surgery."

In confirmation of the truth of this statement, we might appeal, with confidence, to the testimony of every thinking member of the profession. Not only so, but much the larger portion of that knowledge which renders the surgeon's skill and address successful, is purely medical. Indeed, without a knowledge of medicine, he would be a vulgar mechanic; he would have no place upon the pedestal on which science and literature stand. Although this is incontestibly true, and although he derives all his merit from the light which medicine has poured into his mind, we daily hear the bold brandisher of the scalpel, on the faith of a few successful operations, which it required but little knowledge or dexterity to perform, arraigning medicine as a conjectural, while he proclaims surgery to be a certain science.

This declaration rests on the preposterous supposition that they are separate and distinct arts. They have not, nor can they have an independent existence—they must be prosecuted together, or they will be prosecuted unprofitably. Neither the one nor the other of them constitutes the healing art, it results from the light that is reflected by them jointly and reciprocally.

So far is it from being true that surgery is superior, on the score of certainty, to medicine, we may assert, with perfect confidence, that the success which the most dexterous operator commands is not owing to his address with the knife, but almost exclusively to the knowledge which he has acquired of medicine; and the marked difference often observed amongst surgeons, is the result of their comparative attainments in the latter branch of the profession. It is a proficient acquaintance with sciential medicine that constitutes the broad line of distinction between the accomplished surgeon and the reckless and sanguinary butcher. The former is a blessing to society and an honor to the profession; the latter, a plague-spot upon both. To practice surgery with success, a very extensive and varied knowledge is indispensable; and it was this which took it out of the hands of barbers—which rendered its enlightened votaries respectable, and which caused its blessings to be shed upon humanity.

Although the performance of a bloody and dangerous operation enables a man to command a degree of consideration with the gaping and overwhelmed multitude, to which few are entitled, a little thought will convince those who are capable of reflection,

that the operation is often the most unimportant step in the process of cure—that often but little skill is necessary in its performance, but that, very generally, it renders indispensable great knowledge and judgment to determine on its necessity. This is a point which can be decided only by an intimate acquaintance with the general health of the patient—the nature of his constitution—the probable influence which it will exert upon existing diseases of other parts, or awakening, into activity those affections to which the constitution may be predisposed, but which are still in a dormant state; by being enabled to foresee the probable consequences of the operation—to decide upon the chances which it offers of a cure—to estimate the danger of leaving the disease, of which the knife is the proposed remedy, to itself. Now these, and multitude of other questions can be decided by a knowledge of medicine only.

Again, all surgical diseases do not require the knife. An operation is an extreme, a violent, and often dangerous expedient, which removes the disease but does not always cure it, and it should not, therefore, be resorted to until every other rational measure has been tried. Even in those cases that render an operation unavoidable, the surgeon derives all his resources in the management of them, up to the time when it is decided that it should be performed, from medicine. The treatment preparatory and subsequent to an operation, in almost every instance, is regulated upon purely medical principles; without a knowledge of which the surgeon is nothing more than a mechanic.

If, therefore, and all must concede its truth, the success of surgery is so dependent upon the medical means which it lays under unsparing contribution, how can it be maintained that it is a certain while medicine is aconjectural art? There is neither sense nor science in the allegation. Medicine in curing intermittents by cinchona, or any of its preparations, is not less certain than a thousand things in surgery in which reason guides much more than the senses do. Similar illustrations might easily be adduced, but want of time and space constrains us to close this argument by remarking, that we are convinced that if a comparison were instituted between the results of the practice of the most skillful in surgery and the most able in medicine, it would be found that as many blunders are committed by, and as many unexpected results happen to, the former as the latter.

Our author properly remarks:

"With respect to surgery, it might have been further stated that much the greater part of the surgeon's practice is medical; that, as our knowledge of the animal economy and of the nature of disease increases, the domain of what is strictly called surgery becomes more circumscribed; so that the purely surgical duties of the surgeon will at no distant period be limited, in a great measure, to the management of accidents, and the performance of the operations required for the very few diseases in which operations are really useful. Indeed, it is well known that no surgeon out of the Metropolis could live by his profession, were he to restrict his practice to surgery: even the practice of the most exclusive London surgeons is, I believe, more medical than surgical, in the strict acceptation of the terms."

What a rebuke this is of the conduct of most of those who go to schools of medicine for instruction! With scarcely an exception, the aim of every student is to acquire surgical knowledge—on this he firmly fixes his attention and to it bends all his energies, and for what? To live by it, doubtless, but were he to reflect that two surgeons are more than sufficient to do all the business in either Boston, Philadelphia, or even in New York, and that one has engrossed the surgery of the whole of the Mississippi valley, for more than twenty years, he would see that it is impossible. Why then, as there is no reasonable prospect of adequate reward for the toil wasted in obtaining surgical knowledge, should such crowds of students hurry off in the pursuit of it? Of the hundreds of young men who cross the Atlantic annually for the purpose of receiving medical instruction, in Europe, not one in twenty of them think of attending to anything besides surgery, and all of them expect upon their return home to interest their wondering friends with their skill as operators. But how many of them have become lustres of surgery, or have even performed half a dozen difficult operations? One, perhaps, in a hundred. Thus they neglect the finest opportunities in the world for studying anatomy, physiology, pathology, auscultation, &c., a knowlege of which would render them able and accomplished physicians as well as useful members of society, while they spend their nights and days in the pursuit of surgical science to become ordinary surgeons and very indifferent practitioners of physic; for to this they have to come, without being prepared for it, at last.

We would not underrate surgery, or cast the slightest reproach on those who are more especially its votaries, but we would have those who go to medical schools for instruction to have clear ideas

of those things to which it is the most important to direct attention. These are evidently those pursuits which are calculated and designed to qualify them to practice physic in the most general acceptation of the phrase—to encounter with deliberation and dignity those emergencies into which they will be daily thrown, and which they cannot meet with success unless they are deeply instructed—to subdue or palliate those common maladies, an attention on which engrosses nineteen-twentieths of the time of every practitioner, and in regard to which they cannot be too well qualified. Such knowledge will bring patients and profit.

We would not have surgery neglected, but we would not have it made an object of exclusive study. We would have it considered of subordinate—not of primary and fundamental—importance. There are few branches of medical learning that will not be found as available in practice, and it is very seldom that students make a proper distinction between what *may*, and that which *must*, be learned. The world wants many physicians, but it has need of but few surgeons, and, therefore, the great body of those who turn their attention to medicine, should make medicine the primary, while they look on surgery as a secondary, object of ambition. A sensible young man, who was taking clinical instruction in one of the Philadelphia Hospitals, was found closely interrogating a case of intermittent fever, while the mass of students were hurrying to see a surgical operation; and he was reminded by his friend that he would be too late, or that he would not find an eligible position, to which he leisurely responded, 'I am in no hurry; the disease I am studying is one I shall see every day of my life, while the operation that is to be performed will be, in all probability, never required at my hands.'

We would like to touch fully on some other points that have been discussed by Sir James Clark, but we have not space to spare in the present number; and we are, therefore, constrained to close this notice with a syllabus of the leading principles and features of his proposed plan of reform, as drawn up in the July number of the Medico-Chirurgical Review:

1. A college, faculty, or ruling body to be formed in each of the three divisions of the empire for examining candidates and granting degrees.
2. The profession to be divided into two grades or classes—Bachelors of Medicine and Surgery, and Doctors of Medicine and Surgery.

3. The education and examination for the BACHELORS to be uniform.
4. Both ranks to pass through the examination for BACHELOR, whether they mean to attain the higher grade or not. Thus, as medicine and surgery are always more or less combined, so the GENERAL PRACTITIONER must pass this ordeal as well as those who are intended for the doctorate.
5. All Bachelors, and of course all General Practitioners, to be eligible for the higher grade, or Doctorate, whenever they submit to the examinations, &c. allotted for that grade.
6. Sir James thinks that a union of the existing Colleges of Physicians and Surgeons, in London, Edinburgh, and Dublin, might constitute the ruling body for the respective capitals.
7. A supreme senate, in connexion with Government, to superintend the concerns of the Colleges and the profession generally. He thinks the present "UNIVERSITY of LONDON," with extension and modification, might be easily converted into the supreme senate.
8. The Bachelors, and consequently the body of general practitioners, to have a voice in the election of the councils of the respective Colleges.
9. A court of honor to be vested in the Colleges or Senate, to punish, by striking off the list, such members as disgrace themselves or the profession by misconduct.
10. Sir James thinks it desirable that the *practice* of pharmacy should be divorced from the practice of physic and surgery.

The above are the chief characteristics of the plan proposed, and we need hardly say that they approximate closely to those which we have long advocated in this Journal.

Proceedings of the Medical Society of the State of Tennessee, at the Thirteenth Annual Meeting held in the City Hall, Nashville, May, 1842.

The proceedings of the *Medical Society* of Tennessee comes to us in a pamphlet of seventy-three pages, and they give the public the most gratifying proof that a very spirited interest is felt by our brethren, of a conterminous state in the advancement of medical science. Among the matters of interest that came before the Society, was an essay on the *Theory and Pathology of Fever*, which was read by Dr. Buchanan, of Columbia, and is published in its proceedings. This paper evinces a commendable degree of research, and considering the object aimed to be accomplished by the author, it is quite a creditable performance. Dr. Buchanan labors, with great zeal and ability, to sustain an exploded dogma; he is earnest in the belief that fever is the result of local inflammatory lesions, and that what is called *Idiopathic Fever*, has no existence. Observation and experience have already, and in

a most satisfactory manner, settled the prominent questions discussed in Dr. Buchanan's essay, or we would speak more in detail on the subject.

Observations on the Admission of Medical Pupils to the Wards of Bethlem Hospital, for the purpose of Studying Mental Diseases. By John Webster, M. D.

The following notice, taken from the *Medico-Chirurgical Review*, of the work of Dr. Webster, on a very important and neglected, if not misunderstood, subject, we transfer, with pleasure, to our pages. We desire that those who have the superintendence of houses of refuge for the insane in this country, should have an opportunity to know what enlightened opinion already is doing to ameliorate the condition of a very unfortunate class of our fellow beings. It is as much their duty to furnish such facilities as may be in their power, to diffuse a knowledge of mental disorders throughout all ranks of the profession, as it is that they should, regardless of *subordinate objects and selfish interests*, put into requisition every plausible expedient that promises to restore those under their immediate care, to the society of their friends and their former usefulness. An institution that has no higher or more comprehensive ambition than to limit its attention to the regulation of the medical and moral management of the insane, on proper principles, will fall infinitely short of attaining all the benevolent purposes of its foundation and endowment. Not only should it mitigate, or entirely remove all mental disabilities, but it should improve and spread our knowledge of insanity. To do this effectively, clinical instruction should be given in every Lunatic Asylum, by a competent teacher, and in the course of a very few years this will be the case wherever those into whose hands the management of such institutions happens to fall, think it a part of their duty to keep pace with the progress of improvement on the subject. This, however, we regret to intimate, is looked upon by many, as a matter of very subaltern consequence: Ed. Rec.

"We believe that there are very few modern physiologists who now consider insanity as a disease of the *mind alone*, but as a disorder of some material structure, more especially of the mind's instrument—the brain. Sensation, volition, and reflection, are just as much functions of the brain and nerves, as secretion of bile is the function of the

liver—or circulation of blood the function of the heart and arteries. It is very true that the primary *cause* of insanity may not always be in the brain. It may be in the liver, the stomach, or other parts; but the brain must be disordered, either primarily or sympathetically, before insanity can manifest itself. The functions of the brain, like those of other organs or parts, may be *disordered*, long before the microscope or scalpel can detect changes of *structure*—which, after all, are consequences, not causes. These are truths which we believe are almost universally admitted, and yet they have not led to the legitimate conclusion that, insanity being a disease or disorder of the mind's instrument—the brain, wherever located may be the original cause—so the complaint ought to be taught in lectures and studied in hospitals like any other corporeal malady.

Dr. Webster has, therefore, done the state, as well as the profession, a service by bringing the subject before the public, in the sensible pamphlet under review. The following passage from Sir W. Ellis, is so much *ad rem.* that we shall here quote it:

"It is perfectly inconsistent with common sense to suppose, that a man shall intuitively know how to treat insanity. We have seen, that although in the greater number of cases it is attended with the same general result, yet it assumes most varied forms, and great care and discrimination are required in the treatment; indeed, it is universally acknowledged to be a most difficult and mysterious disease, and yet it is almost the only one on which the medical student receives no particular instruction. In his attendance on the hospitals, he will, in all probability, have met with almost every other variety of disease which afflicts human nature; at all events, his lectures will have supplied him with some information as to their treatment; but I believe that my friend and colleague, Dr. (now Sir Alexander) Morrison, of Cavendish Square, is the only lecturer in London expressly on insanity. Indeed, excepting as being incidentally touched upon in the lectures on forensic medicine, it appears almost entirely neglected in the course of a medical education; and, as the subject does not form a branch of examination, the pupils naturally employ their time in those studies which will be directly available, and assist them in the obtaining their medical certificates; the result is, that professional men, in other respects well educated, commence practice almost in a state of total ignorance on the subject. This is an evil from which every individual, whatever be his rank and fortune, is liable to suffer in his own person, and in that of his friends; and a man of ingenious mind can hardly be placed under more painful circumstances, than to find the father or mother of a family in a state of insanity, entrusted to his care, and to feel conscious that upon him depends the restoration of the patient to reason and happiness, whilst his want of acquaintance with the disease renders him unfit for the task, and he knows not where to apply for advice. This is by no means an imaginary evil; it is one of frequent occurrence, and numerous are the instances where amiable and valuable members of society are consigned for life, to a perpetual banishment from their friends in the gloom of a mad-house, solely from ignorance on the part of the medical adviser. This ought to be remedied."

But it will be said, "Oh! insanity is a disease of the mind, and must be cured by moral means." We deny the fact, or rather the fiction. In the first place, insanity is *not* a disease of the mind, but of its organ. In the second place, although moral means are, perhaps, more important auxiliaries in the treatment of a complaint affecting the organ of thought than of one affecting an organ of circulation, secretion, or absorption, yet still they are auxiliaries, and will not succeed in one case out of ten, without physical remedies. And how are the causes and phenomena of the disease, or the adaptation of remedies to be learnt but by the same process as in other corporeal ailments—namely, by precept and example?

Till the curricula of the medical corporations include lectures and clinical instruction in this branch of medical science, it is not to be expected that students will search for information beyond the sphere of their ordinary teachers, or that lunatic hospitals or asylums will open their doors to the clinical inquirer. Since Dr. Webster wrote this brochure, we are happy to see that a course of lectures on insanity has been instituted by Dr. Conolly, and we sincerely hope that this auspicious beginning will be followed by the opening of wards for clinical observation at the great institutions, metropolitan and provincial, dedicated to the use of insane people, of both sexes.

Dr. Webster properly observes that Bethlem Hospital is peculiarly well calculated for affording excellent clinical instruction. The wards contain generally from 310 to 340 patients—and the wards are designed for the reception of cases that are probably curable—not a receptacle for those who are beyond all hope of recovery. The objection made by governors, that the sight of pupils going round with physicians might excite, and thus injure the insane, is quite futile. No such effect is produced in general hospitals, even where patients are suffering from violent or acute diseases—or undergoing formidable operations. We quite concur with Dr. Webster in the following remarks:

"So far from considering, that the judicious admission of pupils, and of young men who are about completing their preliminary studies, to the wards of Bethlem Hospital, would prove injurious to the inmates, I believe, if properly regulated, such permission would even sometimes act advantageously. This opinion is founded upon the supposition, that the regular visits of the physicians, although accompanied by pupils, would, in some of the patients, tend rather to distract the attention from their false reasoning, whilst in others it would appear as if bringing them in contact with the external world, and so produce a more favorable impression upon their disordered imaginations. Besides the appearance thus given to the establishment, of being somewhat like an ordinary hospital, for the restoration to health of its inmates, instead of a common mad-house, in which all contact with the world outside its walls is generally cut off, might have a favorable impression; especially as it is a well known observation, that the fear of being placed in a lunatic asylum, often exerts an injurious influence upon the minds even of the insane; to say nothing of the very disagreeable associations, which it produces upon friends and relatives."

Dr. Webster concludes his pamphlet with some judicious remarks on the management of the insane at this period as compared with that pursued at the beginning even of the present century. Whilst he properly condemns chains, dark cells, handcuffs, &c. he candidly acknowledges that—

"When an insane person is either dangerous to others, or likely to inflict injury upon himself, restraint may, in that case, become necessary."

This is all we have ever contended for, in the way of restraint. We return our best thanks to Dr. Webster for his sensible and well-timed letter, a second edition of which is already published."

MONHTLY PERISCOPE.

Radical Cure of Reducible Inguinal Hernia. By Dr. C. Haller.—Seven cases are given. The operation, as detailed in the first of these, was as follows: The patient, a man of twenty-three years, had ruptured himself in 1837. In 1840, when the operation was performed, his hernia, which was on the right side, had attained the size of a hen's egg, was soft, elastic, and contained a small knuckle of intestine. It made its appearance on the patient coughing or violently exerting himself, but receded on his assuming the horizontal position. The inguinal ring was so far enlarged as to admit the index-finger. The rectum having been emptied by a clyster, the scrotal integument was invaginated in the inguinal canal, by the index-finger of the operator; while, with the right hand, by means of the *sonde a dard* two stitches were made; the one as high as possible on the inner crus of Poupart's ligament; the other just over the angle of the two crura. A ball or cork of lint was introduced into the loop thus formed on the thread; traction was applied to one end of the thread, by which the lint-ball was carried as far as possible up the inguinal canal; the double threads were then separated, and tied down over two quills united by sticking plaster. Ice was applied to the seat of operation; the testicles were supported; the patient was ordered to bed, and put on low diet. There were slight pain and redness, but considerable swelling and hardness around the cylindrical aperture; and on the sixth day there were light febrile symptoms. As suppuration commenced from the punctures, the threads were loosened; the lint slightly withdrawn, and thus a free exit permitted to the matter. Warm applications to the part, daily ablution, and syringing of the invaginated integument, laxative clysters, constituted the treatment. The suppuration continued during fourteen days, and as it declined, the integument gradually subsided into the inguinal canal. On the 28th day from the operation, the patient, with

the aid of an elastic band, could stand up, and move about a little. The inguinal canal was appreciably narrowed, and even violent coughing or straining did not reproduce the hernia. In nine months the patient dispensed with the truss. In two or three cases the cure was only temporary, the hernia again descending and carrying the integument before it. But in several instances the operation has been successful. *British and Foreign Medical Review, from Oesterr. Medicinische Jahrbucher.* Marz, 1842.

On the Nature and Treatment of Scrofula. By Dr. Roesch.—After enumerating the different forms of scrofulous cachexia, Dr. Roesch arrives at the conclusion that scrofulous affections are produced by an excess of acid matters in the fluids of the body. Agreeing with the ancient physicians in his theory of the disease, he recommends their plan of treatment, viz: absorbents, alkalies, and fat or oily matters. He says he has observed that, in those countries where the children get a quantity of lard and other fat matters with their food, that scrofula is extremely rare. Cod-liver oil is, therefore, according to him, one of the most suitable remedies to administer in this disease, seeing it possesses the rare properties of being at once a stimulant, a roborant, an antacid, and nutrient. He considers that the iodine in it will have a very secondary effect, the other properties of the oil being the most valuable.—*Ed. Med. and Surg. Journ., from Haeser's Archiv fur die Gesammte Medicin.*

Let the vegetable and gruel doctors reflect on this!—*Ed. Rec.*

Medical Pupils admitted to the Wards of the Hanwell Lunatic Asylum.—We do not know that instruction can enlighten those who think that "the more ignorance the more peace," or that facts can unfetter minds that clank with pleasure the chains of prejudice; still we regard it as a precious privilege that we are permitted, from time to time, to spread before the public mind such considerations as should provoke it to profitable reflection, and which may, ultimately, prompt it to the zealous discharge of a sacred and binding duty. Ed. Recorder.

Hanwell Lunatic Asylum.—We have much pleasure in recording the recent delivery of a series of clinical lectures in this Institution, with admission to what may be termed the practice of the Asylum. Great credit is due both to Dr. Conolly for his exertions in bringing it about, and to the Visiting Justices for their boldness and liberality in consenting to the experiment, notwithstanding the numerous objections which were urged against it, and the prejudice which it had to encounter. It must be a source of great satisfaction to all concerned, to find that the experiment has succeeded so well, that no excitement appears to have been produced amongst the patients by the visits of the students, whilst the students have had an opportunity of acquiring, for the first time.

much valuable information upon a subject, the study of which has hitherto been attended with so many difficulties.

The plan adopted with regard to the admission was, to give to each of the principal Metropolitan hospitals, the privilege of sending one of their more advanced pupils; thus at once reducing the number within the necessary limits, and by having only senior pupils present, rendering it unnecessary to occupy any valuable time with the more elementary parts of the subject.

We shall refrain from noticing more particularly the lectures themselves at present, as we are not without hopes that Dr. Conolly may be induced soon to publish them in some form or other, an address having been presented to him to that effect at the last lecture.—*M. Chir. Rev.*

Nitrate of Potass in Hæmoptysis.—M. Gaudinau has employed large doses of nitrate of potass in many cases of hæmoptysis, with great success. He prescribes from eight to fifteen scruples of nitrate of potass, dissolved in one hundred and twenty of gum water, and sweetened with fifteen of syrup, one or two of these mixtures being administered in the course of the twenty-four hours. He has never found any unpleasant consequences in the digestive apparatus from so large a dose. This remedy has succeeded in cases of frightful hæmorrhage, when repeated general and local bleedings, pectoral ptisans, opiate looches, revulsives, and astringents have failed. The nitrate of potass has failed in only two cases out of fifty.—*Prov. Med. Journ., from Travaux de la Societe Med. de Dijon.*

The efficacy of this remedy in hæmoptysis and menorrhagia has been familiar to us for more than twelve years. Indeed it has been our uniform practice for that length of time, to prescribe half drachm doses of the nitrate of potass in both of those affections, and with invariable success, provided suitable care was taken in discriminating the cases in which it was employed. According to our experience it is principally, if not exclusively, efficacious in those cases that are marked by considerable strength and force of the circulation. When the skin is cold and circulation languid and feeble, so great is its sedative influence that we are of opinion it has done more harm than good. EDITOR RECORDER.

On the Employment of Cold Affusion in Acute Hydrocephalus. By Dr. MUNCHMEYER, OF VERDEN.—This has been, for many years, a favorite remedy with us, not only in Hydrocephalus, but in all disorders of the brain in which that organ appeared to be overloaded with blood. We think, however, that much of the efficacy of cold, as a remedy, depends on the manner in which it is applied; and also, that it is much more useful before than after effusion has taken place. The mode adopted

by M. Cloquet is greatly superior to any that we have seen, or have, employed. When not used continuously and perseveringly until its sedative influence is decidedly felt, and, indeed, until morbid excitement is completely subdued, every practitioner knows that the reaction which follows its suspension, will be so great as to produce more harm than good. The plan just alluded to, obviates this inconvenience, and consists in placing on the head of the patient a large bladder, which is connected by a syphon with a vessel containing water. This vessel is placed above the patient, so that the water in it may pass with facility through the syphon into the bladder, and out of the latter it is conducted by another syphon, so that over the head of the patient there is constantly passing a current of water, the temperature of which the physician may regulate as he wishes. Besides the uniformity of impression which this mode of applying cold water keeps up, it presents the additional advantage of so confining the water as effectually to prevent it from saturating the bed-clothes, and thus proving a source of great inconvenience and annoyance to the patient: Ed. Recorder.

"Dr. Munchmeyer observes that the medical world is greatly divided in opinion as to the value of this remedy; some persons greatly extolling its efficacy, while others regard it as altogether useless. He considers it to be a most important remedy, and one which will often save life when all other means have been useless. One great reason why cold affusion has met with so few supporters, is to be found in the misconception which has prevailed with reference to the proper time for using it. It is certainly not always advisable to resort to it, and it should never be forgotten, that its mode of action differs essentially from that of cold when kept constantly applied to the head. In the employment of cold affusions, it is the secondary action of cold, as well as the sudden shock to the system produced by the mode of its application from which benefit is expected, while in the case of cold lotions to the head it is the primary action of cold which is obtained. Cold affusion then must be looked upon as a directly anti-phlogistic remedy, nor is its employment indicated during the early inflammatory stages of hydrocephalus, but rather when affusion, the consequence of inflammatory action, has taken place, and a tendency to paralysis exists. After the subsidence of the violent symptoms of the disease, and when the patient has sunk into a comatose state, with a pale countenance occasionally suffused with a flush, dilated pupils, strabismus, and slow pulse, this remedy will frequently prove of excellent service.

In order, however, for benefit to be derived from it, it must be employed in an efficient manner. Dr. Munchmeyer directs that the patient should be taken out of bed, stripped of his clothes, and wrapped

up in some simple covering, (if water-proof the better,) which leaves only his head exposed. He should then be placed in a sitting posture in a bath or tub, and the person who administers the affusion should mount on a chair and pour cold water upon his head, in a moderate stream from the height of five or six feet. This may be continued for a minute or two, and repeated twice or thrice. The patient should then be wrapped up in a warm sheet and placed in bed, where he should remain till it is thought proper again to have recourse to the remedy. At first, it will probably be requisite to repeat the affusion, in the course of an hour and a half or two hours; but as the patient improves the interval may be longer, so that at last it will not be necessary to employ it above two or three times daily.

The immediate effect of cold affusion is, that the patients awake from their comatose condition and begin to cry violently, which they continue to do so long as the water is poured upon them. They afterwards appear exhausted and pale, the skin is cool, the pulse small and very frequent. When placed in bed they usually fall into a dose, the pulse becomes more regular, and the warmth of the skin returns. By degrees, as with the repetition of the remedy the patients improve, they begin to have sound sleep, from which they awake in the possession of all their senses, recognize those by whom they are surrounded, and cease to squint. At the same time too, a sweat, frequently of a critical nature, breaks out upon the whole body, and during its continuance the employment of cold affusion is very hazardous. The patient's sleep becomes more refreshing, and the comatose condition recurs at longer intervals; he begins to notice what goes on around him, the head regains its natural temperature, and the febrile symptoms disappear. The employment of affusion must, however, still be continued for some days, since relapses very frequently occur.

The paper is illustrated by five cases. In three the employment of cold affusion was perfectly successful, in one it produced temporary amendment, and the death of the patient was to all appearance owing to the apathy of the parents, who neglected to persevere in the treatment, while in the fifth convulsions and death followed affusion while the patient was perspiring profusely.—*N. Y. Lancet, from Brit. and For. Med. Rev.*

Spinal Irritation in Intermittent Fevers.—Dr. Gouzee has published an important communication on the morbid sensibility of certain portions of the spine in cases of chronic intermittents in the "Annales de la Societe de Medicine d'Anvers," in which he states that this remarkable and little known fact of the production of pain by pressure on a particular point of the column in agues has a direct reference to practice. The manipulation, according to him, requires considerable practice; each of the spinous processes must be examined successively from above downwards, the apices of the index and middle fingers being pressed perpendicularly on the top of the process in its recognised direction, the compression being applied gradually and equally on all. In general the patient is not aware of this morbid sensibility, and bears the examination of the cervical vertebræ with indifference, but as soon

as the operator commences with the dorsal, he shrinks and gives evident indication of pain. Most frequently, while two or more vertebræ are tender to the touch, one of these will evince a higher degree of irritability than the rest, as may be ascertained by repeated examinations. The same amount of pressure, exercised on the lowest range of vertebæ, will not cause any appearance of suffering.

In illustration of these statements, Dr. Gouzee narrates several cases in which antiphlogistics and counter-irritants applied near the painful portion of the spine, produced the most beneficial results. Leeching, cupping, and the Burgundy pitch-plaster sprinkled with tartarised antimony, so as to produce pustulation, where the remedial agents had recourse to, and were found of exceeding service. In the cases recorded, each application of leeches was followed by a marked relief of the symptoms, a diminished intensity of the febrile accessions. In one case, pressure showed the existence of morbid irritability of the spine in the neck, as well as in the dorsal vertebæ.—*Prov. Med. Journ.*

Extraordinary Case. SIR:—One of the most extraordinary cases I have ever heard of, occurred on Monday, and believing the narration worth a corner of the *Lancet*, I send it you. George Meade, æt. 5 years, son of Mr. John Meade, Manhattan Place, between Reade and Duane streets, about two years ago became suddenly very ill, and has continued so, with occasional remissions, since then till last Monday morning. General emaciation and febrile excitement, with great pain in the pyloric orifice of the stomach, were the prominent symptoms. Convulsions of from twenty to thirty minutes' duration frequently occurred. His parents tried physicians without number and without success, till despair induced them to give up all hope. The continual pain in the stomach gave them the idea that he had swallowed a pin, or something of the kind, which continued fixed, causing the trouble. So firmly were they persuaded of this, that, though full of the ordinary prejudices regarding post-mortem examinations, they resolved to have him opened after death, to satisfy themselves of the truth of their conjectures. Last Sunday evening the child was unusually well and eat heartily of boiled crabs, which causing a slight diarrhœa, gave him a sudden desire for stool next morning. While there, he complained of something falling down his thighs, and on rising, an animal slightly resembling a mouse, long snout, short body, and long, thin, veal-colored legs, and large hairs round the lips, was found moving in the fæces. It lived some time after this, but was killed finally. The child has been considerably better since. Any person may satisfy himself of the truth of this relation by calling at the above place, where the preparation and child may be seen, and his doubts removed.

Yours, JOHN B. NEWMAN.

58 Essex street, August 31st, 1842.—*New York Lancet.*

Tincture of Sesquichloride of Iron in Gleet. By S. E. R. JONES, Surgeon.—In former years I have had considerable difficulty in the thorough cure of "*gleet*," being able to put an end to the discharge for a time, as is generally the case, to return.

I will now relate "two cases" out of many where I have succeeded in permanently eradicating this troublesome complaint by the tincture of sesquichloride of iron.

John Thomson, aged 24, had gonorrhœa eighteen months ago, and gleet continued since; has been under treatment of a surgeon, who ordered cubebs, copaiva, &c., but as he was careless of consequences did not apply regularly: he had a discharge of thin, white pus when he applied to me. Ordered nitrate of silver and sulphate of zinc injections, alternately to be used, but without effect. I then made use of the tincture of iron, gts. xxv., three times a-day, and gradually increased to gts. xl.; in a fortnight he was perfectly well; has had no return since.

Wm. Simpson, aged 21, had gleet twelve months; ordered the tincture of iron, dose, gts. xx., two or three times a-day; to be increased to dose gts. xxxv. After seven or eight days the discharge had nearly ceased; in fifteen days he was cured.—*Phila. Med. Exam., from London Lancet*, July 2, 1842.

On the Delirium following Acute Meningitis, and its Treatment by Cold Affusion. By M. Recamier.—In the Hotel Dieu, under the care of M. Recamier, was a man who was the subject of chronic delirium, unaccompanied by any sign of disease of the brain or its membranes. He had already had two attacks of a similar kind, the second more severe than the first, and the third than the second, but they all yielded to depletion, which in the last instance requires to be repeated several times. In the same ward was another patient in whom delirium remained after symptoms of inflammation of the brain, and depended, in M. Recamier's opinion, on some modification in innervation produced by the disease, not on any continuance of the actual malady.

Two other similar cases are mentioned by him in which chronic delirium was removed by the employment of cold affusion. One was the case of a young lady in whom delirium existed unaccompanied by the signs of meningitis, but with irregular automatic movements of the hands, in which she crammed anything that was given her into her mouth. M. Recamier began the treatment with cold affusion of water at 68° Fahrenheit during five minutes, and gradually reduced the temperature to 50°, and prolonged the affusion for ten minutes. It was not, however, until affusion was practised at 89° that any effect was produced, but then the patient was seized with a tetanic spasm, and lost all consciousness. She was at once placed in bed, warmth was applied to the surface, and she speedily recovered, and asked for her mother, for whom she had before shown a marked aversion. Pen and paper being given her, she now wrote a perfectly sane letter, requesting her mother to visit her. The affusions were still continued at a temperature of about 64° for some days, and the patient recovered uninterruptedly.

In this case, which had followed an attack of meningitis, warm baths had been employed for a considerable time, without leading to any results. In the second case the same treatment was employed with success in a man who had become insane from spirit-drinking. In three different attacks the remedy had the effect of restoring his reason, but

his intemperate habits were so deeply rooted that he eventually brought on a condition of permanent delirium, for which he was received into the Bicêtre.—*Brit. and For. Med. Rev., from Gazette des Hopitaux.*

Injections of the Nitrate of Silver.—Dr. Daniel, of Cetto, describes the case of a Venetian, thirty-two years old, labouring under catarrh of the bladder, complicated with syphilis, impotence, and more or less involuntary discharge of semen every morning. The syphilitic complaint was treated with baths containing the deuto-chloride of mercury, and for the affection of the bladder and caput galinaginis he was ordered an injection of 125 scruples of distilled water, in which had been dissolved 32 grains of nitrate of silver. This was injected into the bladder with the best effects. The strength of the solution was gradually increased, and the patient was cured in less than three months of his syphilis, vesical catarrh, and impotence. Dr. Daniel heard afterwards that he had recovered, and that his wife was pregnant.—*Prov. Med. Journ., from Journ. de Med. Pratique de Montpellier.*

MONTHLY MEMORANDA.

The cholera is again raging at Calcutta, Bombay, and in the Deccan. Out of one Irish regiment stationed at Kurreshee, there had died in one month, says a recent letter, 1 band master, 1 sergeant major, 3 sergeants, 120 men, 12 women, and 20 children.——A physician in Philadelphia extracted seven small worms from the ear of a child, not long since.——Dr. Mackenzie has pointed out that, in cases where hydrops pericardii is combined with co-existing effusion into the pleura, the patients are unable to bear the horizontal position, but that when the fluid is confined to the percardium the horizontal position is preferred, probably from the weight being thus taken from off the diaphragm.——Dr. Streeten, of England, speaks highly of the ioduret of lead in scrofulous glands. But possibly, he is too sanguine, for he thinks that true scirrhus of the mamma has been cured "in more than one instance," that he has witnessed by iodine.——Dr. John Morehead has been appointed Professor of Theory and Practice in the Medical College of Ohio. In the same Institution, a professorship of *Physical Diagnosis and Pathological Anatomy* has been created, to which Dr. N. Worcester has been elected.——Hooping cough is so prevalent at Elkton, Maryland, as to have caused great anxiety. Many children are represented to have died of it of late.——A plant is found in the Western prairies, the leaves of which indicate the North and South pole.——Mr. Jas H. Hanford, of Newgate, aged 29, died recentl yfrom the effects of pulverized Turkey opium, which, through a mistake of his own, he procured at an apothecary's, instead of pulverized Turkey rhubarb.——D. Miguel Munoz has petitioned the Mexican Government for the ex-

clusive right of making metallic legs, of his invention, during the term of ten years. He represents them as far superior to any other kind of artificial legs hitherto invented. With one of these legs, he says, a man can walk, or even dance, without the aid of crutches.——Mr. A. Berard has been elected Professor of Clinical Surgery, made vacant, recently, by the death of M. Sanson.——Twenty-two deaths have occurred, and fifty houses and barns been destroyed in the United States, since June last, by lightning. There never was a season in which the terrible effects of this agent of nature were so severely felt.——In a late number of the *Bulletin of the Royal Academy*, it is stated that M. Double, one of its most zealous and learned members is dead.——A Mrs. Berry, living in Armistead Lane, Federal Hill, swallowed a needle, which alarmed her very much, but which, to her great surprise and gratification, she found, in two or three days, making its exit near the region of the heart.——M. Delmas reports two cases of rupture of the uterus from the alleged improper use of secale cornutum.——William P. C. Barton, M. D., of the U. S. N., has received the appointment of *Chief* of the Bureau of Medicine and Surgery, in the late reorganization of the Navy.——Dr. Forry has completed a great work, entitled "Physical Geography of the Earth, and its relations to organized and living beings, with special reference to the climate of the United States.——A public dinner was recently given to Dr. Jacob Randolph, at Philadelphia, on his return from Europe. This was a gratifying compliment, and no doubt was richly deserved.——Dr. Alison has succeeded Dr. Home in the professorship of Practical Medicine in the Edinburgh University.——Recently, at Lyons, in France, Baron Larrey, the celebrated surgeon and favorite of Napoleon, died at the advanced age of 76.——Dr. A. Morren, of Rochester, has had a public exhibition at old Concert Hall, in that city, to illustrate the gross impositions of animal magnetism, which must have been, it is said, an amusing affair. The doctor has a card in the Rochester Evening Post, in which he thus explains the object.—"I did intend to mislead the public temporarily, in order the more perfectly to undeceive them on the subject of animal magnetism, and thus assist in banishing a humbug."——During a late thunder-storm in the commune of Mios, Bordeaux, the electric fluid fell on a large head of cattle, and killed one hundred of them, and also the two keepers.

To Correspondents.—The articles of Drs. McGuire, Groce, Sneed and Crook shall appear in the next number. We regret that it is not in our power to have such a wood-cut made as will give a satisfactory representation of Dr. Carson's valuable dental instrument, and, consequently, we shall be obliged to decline the publication of his article, at least, for the present.

THE

WESTERN AND SOUTHERN MEDICAL RECORDER.

EDITED BY JAMES CONQUEST CROSS, M. D.

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No. 12. LEXINGTON, KY. OCTOBER, 1842. Vol. 1.

THOUGHTS ON SOME OF THE ALLEGED IMPROVEMENTS IN MEDICINE.

BY JOHN C. DARBY, M. D., OF LEXINGTON, KY.

Have you read M. Louis' book on Fever, or M. Andral's Clinique? is a question often asked in these days of medical debate. Dean Swift has written a very interesting work on the reign of Queen Ann, wherein he points out, in his happy style of pure English, the glories of that period of British history. It was an age, indeed, prolific in great men; and the reign of Queen Ann would, for many centuries to come, have been referred to as one of the most glorious of Old England, though she had not had a Swift to immortalize her memory. Who will write the medical history of the present half century? And what will he say for us? Who will be called the Bacon, and who the Newton, of the nineteenth century? Have we settled the questions of the Humoralists and of the Solidists, or of the Systematists and the Empyrics? Have we been able to shut Pandora's box? Does the sana mens in sano corpore more frequently obtain now than it did in the days of the author of that expression? Our knowledge is said to be now not only general, but particular; and it is, withal, wonderfully extensive. Perhaps it may be said with

truth, that many of the most successful physicians that the world ever saw, could not have graduated, even in one of our American Schools, so extensive and scientific is now the course of medical study. The wonder is, what were they about during their tedious apprenticeship? Their knowledge of Physiology was so limited, that it could not have required much time to study it. Of Anatomy, and especially of Pathological Anatomy—if we judge them according to what would now be considered a fair standard of such knowledge in London or Paris—they would be found to know absolutely nothing. And yet they cured men, and that, too, of very violent forms of disease. What, then, have we done? Why, some of us have stumbled upon the practice of some man who lived perhaps a thousand years ago; and if, perchance, we are not so learned as others of our brethren, we have been vain enough to declare that we had originated a new practice, while others, who are more literary, presuming on the ignorance of the body of the profession, transcribe from some scholar who perhaps lived in the days of Queen Ann, a page or two from his translation of some Greek or Latin writer, and make out of those few pages a book for a library of some sort or other. Let a man read Hippocrates on diet, and Celsus on the habits to be practised to secure and continue health, and he will be satisfied of the truth of these remarks, not to mention other instances. But we have gained one important step. We can make a surer diagnosis. No physician will dispute the importance of this advance, if we have really made it. But how stand the facts? Can we tell whether a case will turn out to be small-pox, or scarlet fever, or measles, before the eruption? I have twice known the physicians of this city to be unable to determine whether the fever was small-pox, even after the eruption appeared, and that not in one case, but half a dozen; and I say this not in disrespect to the Faculty of Lexington, for I honestly believe that we have as good physicians here as there are in London or Paris. Neither Andral, Louis, or Chomel, can tell, by diagnosis, whether a case will turn out to be Dothinenterite, or something else, until three or four days after the attack, while there are not wanting some as learned and far more successful physicians, who deny or know nothing at all about such a disease as the French school define this Dothinenterite to be. If you think this remark extravagant, read Clutter-

buck, and Barker, and Cheyne's work on the (so called Typhus of Ireland.) Doubtless, Louis, as well as Andral and Chomel, would have found Payer's and Brunner's glands, and the Lord only knows what all besides, in many of those cases, had they have been taken to the Hotel Dieu, or La Charite. But luckily for the living, the Irish Doctors did not cut open the bellies of the dead, else perhaps they would soon have ceased giving calomel and jalap, and jalap and cream of tartar. Now, I do not say that the cases recorded by the host of learned Irish Doctors, quoted by Barker and Cheyne, were very much like those given by Louis, Chomel and Andral, nor exactly similar to the cases of typhoid fever which we refer to the species of Dothinenterite of the French school. But what I mean to say is, that had they have been under the observation of the French physicians referred to, with all their skill in diagnosis, they would have made a majority of them out to be cases of Dothinenterite—such is the force of preconceived opinion; and, under their treatment, they would have had numerous opportunities to have proved them to be such.

Let it be clearly understood, while on this subject, that I do not deny the existence of a peculiar fever presenting an aggregate of the symptoms which characterize the Dothinenterite of the French school; but I do deny that either Louis, Andral, Chomel, or any other man of the present age, has discovered any thing important, either in a pathological or therapeutical point of view, in reference to that form of fever. They have come to no conclusion as to the cause of the fever. They, in truth, know nothing about it; for their theory precludes the consideration of those causes which would have been considered efficient by Hippocrates, Sydenham, or Rush. They have established no rational connection between the symptoms and the supposed lesions. Diarrhœa is the most constant, and that is far from being constant, in this country, at any rate; nor is it so in Paris.

While expecting (*en expectante*) what lesions may be forming in the mucous membrane of the stomach and bowels, before making up this diagnosis, and *en expectante* what may be the termination of these lesions, they neglect to consider what changes *must be* going on during the progress of this continued fever, the patient living the while on almost nothing. The important part which the liver must act, is not considered, even although M.

Louis found that gland softened in about one half of the cases which he examined post mortem. That the healthy action of the liver is a sine qua non in sana mente in sano corpore, none will dispute. That this healthy or natural action must be disturbed in all continued fevers, all must allow; for I consider it as one of the settled principles of medicine, that without a disturbance of the secretory apparatus, *fever cannot exist;* and the liver is the most important of the secretory organs.

I shall not here attempt to discuss the office of the liver, or its mode of action, in preserving and restoring health. It has been well and faithfully done in the former numbers of this Journal. All I contend for is, that it must perform a part, and an important part, in the case of every fever, whether it be roused to, and kept in action, by the vis medicatrix naturæ, or by the therapeutical efforts of the physician. But while I allow that there is such a fever as the French and gentlemen in this country define Dothinenterite to be, I deny that the lesions spoken of, constitute the essential part of that fever; they may exist, and no doubt do exist, in a majority of the protracted cases. But they do not produce the fever. The fever produces them. Where are these diseased follicles or glands found? I would answer, in those organs and tissues the farthest removed from the influence of the nerves of sensation, or of animal life, and in the domain of the nerves of organic life. The ganglionic nerves, which are said to be nerves of no or feeble sensation, supply the tissues where the lesions are uniformly found. They exist, or are found in those organs which perform the first and most important part in assimilation; in a word, in the glands or follicles of the mucous membrane of the bowels, where the lacteals are found, and in the mesenteric glands. And are not symptoms similar to those of Dothinenterite and post mortem appearances exactly the same, found in men who die of starvation? Would any man say that the want of food and drink was not the cause of both the symptoms and the lesions, in the case of a man who died of starvation? M. Chomel says these lesions are also found in cases which die of cholera and of phthisis pulmonalis and scarlatina. And does the essential nature of cholera and tubercular consumption and scarlatina consist in a Dothinenterite? M. Dujat, I think, has clearly shown, in his theses, that the something which, if not checked, will lead to the fatal ter-

mination in that melancholy disease, consumption, is in primo loco a cachexia. To apply this to the typhoid fever, we should have to fall back to the exploded doctrine of humoral pathology. Of that I will say nothing at present; perhaps I may hereafter. I am not pretending to enlighten the world, but would only show that the world has not been enlightened.

To conclude on this part of the subject—and I have to regret that the number of pages allowed me in the Recorder will not permit me to explain my views more at large—I would say, that the lesions which exist, or may exist, in Dothinenterite, or typhoid fever, hold about the same place in importance in that fever, that the eruption does in scarlet fever or measles; and all physicians know that the most unmanageable forms of those fevers, especially of scarlet fever, are the cases in which the eruption does not appear. The difference is this—that eruption is more likely to obtain in the former disease, because it is developed in those tissues which will the soonest succumb when the powers of the animal system are being broken down.

But perhaps those gentlemen have been more fortunate in the treatment prescribed. It would be difficult to tell what they do prescribe. If they or any body else think that they have discovered that this form of fever requires but little medicine, they are very much mistaken. To go no farther back than the immortal Sydenham, he certainly observed that some forms of fever required but very little medicine. And certain it is that there are many physicians in this Western country even, who have learned from experiment the same important fact; men who have not read a medical work written within the last quarter of a century.

The practice of the French school has been honored with the name of "the Rational Practice," because says Dr. Bell, the physician reasons on the case. I see the drift of the thing, the effort is to reduce medicine to an exact science. But in what the reasoning consists when the Doctor confesses ignorance of the cause of the disease; grants that he cannot point out any obvious connection between the lesions or seat of the disease and the symptoms, and at last is altogether in doubt whether the lancet, emetics, injections or cathartics are the most advisable therapeutical means to be used, I confess I cannot find out. M. Andral in his voluminous Clinique, details a number of cases treated by the different methods

referred to. A certain number of cases were bled, and hardly any thing else was done besides. The result was far from being satisfactory. It often aggravated the symptoms, especially the complaint in the head. We have not found bleeding in this country to be of much advantage; except sometimes when performed in the earlier stages. Others took emetics. These (Ipecacuanha) sometimes stopped the diarrhœa. As a general thing, they could not be recommended with any confidence. A similar result has attended our trials of emetics. Others again were treated by cathartics. Among their cathartics, calomel I think was seldom found. They were not much more fortunate with these; indeed they seemed often to increase the disease. All these failing, some took no medicine at all, excepting the most simple drinks. These used injections, which indeed were not omitted under any course of treatment: for this thing is a matter of course with the French. After all, the patients died. At least as many died, and *may be* more, than would have died had they have been in the hands of Celsus or Aretæus.

One objection which I have to the mode of treatment alluded to, is the relying upon one thing at a time to the exclusion of all other efficient means. It would seem that there was no other form of fever in Paris than Dothinenterite. When a case is sent to the fever ward, it is to be treated for that malady. Now this may be so in France, but it is not so in the United States. Since the cholera, the low continued fever, with irritable bowels, has been more frequent here than before that period. In the language of Sydenham, the epidemic constitution of the atmosphere has so determined the general character of all febrile diseases. But while this general type has prevailed, there has been a very striking dissimilarity in the symptoms as the cases occur in different neighborhoods, and often in the same family. Sometimes the bowels are very irritable; the stomach is easily nauseated. In other instances, there is constipation of the bowels for the first week or ten days. And again, hæmorrhage from the bowels is of very frequent occurrence. Now, it would not do by way of experiment in therapeutics to advise for a given number of cases, taken promiscuously, either the lancet or cups, emetics, cathartics, or injections. There is, indeed, a wide field for therapeutical experiment, if conducted with judgment. The doctrine of combination

holds here an important place, and, as in arithmetic to the uninitiated, the results are often wonderful.

Before medicine became quite so scientific, eclecticism was the practice of all physicians distinguished for curing the people. In a knowledge of the powers of medicines, and the proper time for administering them, was to be found the great fort of the old physicians—this was their study. When we reflect upon what are called the great improvements in medical science, we are forced to lament over the fact that so much learning should be to man of so little avail, and exclaim in the language of the evil-stared Boabdill, "Thus it is ever, the wisdom of the intellect fills us with precepts which it is the wisdom of action to despise; Oh! Holy Prophet, what fools men would be if their knavery did not eclipse their folly." But it is the misfortune of mankind that there are too many fools who delight in such folly. I have often been amused to hear medical gentlemen who had but a smattering of what is called French practice, men who never examined half a dozen cases post mortem in their lives—in the very face of the declaration of Louis, that Broussais with all his knowledge of pathological anatomy, was not qualified to tell the cause of death from a post mortem examination—say, in the most positive manner, that this or that *particular lesion* existed in a case; and that too, where Louis and Lænnec confess that they are as often wrong as right. *Horum semper ego optarim pauperimus esse bonorum.*

Not neglecting what is valuable in modern works, which it shall be my endeavor to learn, I shall feel myself happy if I may be able to digest and carry into practice the principles of Sydenham, of Rush, of Abernethy, of Huxham, of Johnson, and of others too tedious to mention among European authors, besides some living teachers in the United States, not one of whom would ever have dreamed of finding in the heart examined post mortem, a lesion to explain or account for the pulse's being irregular in the commencement of typhoid fever and afterwards becoming regular.

D.

A CASE OF INJURY OF THE THIGH.

DENUDED PETELLA—CONSTITUTIONAL SHOCK—EMPHYSEMA—TERMINATING IN DEATH.

BY W. C. SNEED, M. D., OF FRANKFORT, KENTUCKY.

THE following case, from the novelty of the symptoms which attended it, seems to me worthy of record. I shall detail the facts as near as I can, without attempting any explanation of the phenomena presented.

Alexander, a negro man, æt. about 30, of stout, healthy constitution, came to his death by an injury received on the 2d day of August, 1842, in the following manner. He was driving a two-horse wagon, and, for the purpose of convenience, as well as to have more perfect control of the animals, by means of the lines used in such cases, he was seated on the axle of the fore-wheels with his feet projecting forwards on the pole. While in this position, the horses became alarmed and started suddenly and so unexpectedly that he lost control of them, and became entangled in the harness, &c. which attached them to the wagon. He was held in this situation until the horses ran several hundred yards; his knees the whole time dragging upon the ground, with his thighs violently pressed and firmly clamped by the harness. The horses were eventually checked, and he succeeded in extricating himself from his perilous condition without breaking any bones, but with extensive laceration of the knees. He was able to stand alone only a short time after his extrication; for the shock given to the system was so great, that, as soon as the excitement from the fright was over, he almost sunk with prostration. The accident happened a short distance from town, and as soon as assistance could be procured, he was brought to his lodgings. I saw him within an hour after the accident happened, and found him in about the following condition:—Very great alarm and agitation in consequence of the danger to which he had just been exposed; pulse not exceeding 50; soft and compressible; countenance wild and confused; mind wandering; skin cold, and bedewed with perspiration.

I made a careful examination of his head and body, but found no injury of any consequence. He complained of being hurt in

the left hip, and also in the right shoulder; but, upon a very careful examination, I found that no bones were broken, and but little appearance of injury. I next examined his left leg, which seemed to be the part most seriously injured. Near the hip joint there was a slight abrasion, but it did not seem to be of a serious character. The thigh was also considerably abraded, but apparently the injury was only superficial. Passing down the leg, I found at the knee an injury which excited the most serious apprehensions. In being dragged over the dirt, gravel and stone, which lay in the road, the whole of the skin, fibro-cartalage and periosteum had been torn from the petella, and nearly the whole surface of that bone was laid bare and exposed. A bruised surface, the size of the palm of my hand, extended from the petella externally and laterally to the popliteal region. From these two denuded surfaces, I extracted a quantity of sand and dirt which had been literally ground into them; to do which, I was compelled to cut away a quantity of shreds of the ligamentum petella and periosteum which hung from them.

Below the knee there was no injury of consequence. I examined the right leg, also, and found the injury done it trifling, with the exception of a slight laceration of the skin over the petella. After giving him a gentle stimulant, to restore the circulation to its proper equilibrium, I had him placed on a soft mattress, the injured leg extended at full length, and a soft poultice applied to the wound. By the time the wound was dressed and other matters attended to, he seemed to be very much calmed and revived. He was enjoined to keep perfectly quiet and compose himself as much as possible.

In the evening at 6 o'clock, (the accident happened about 1, P. M.,) in company with Dr. Roberts, I visited him again, and found that he had become quite composed and was free from pain. His pulse had risen to about 73. The poultice was continued, quietude enjoined, and a dose of sal epsom ordered to open his bowels.

3d. At 7, A. M., we visited and found him doing well. The poultice had softened the edges of the wound, and there were favorable indications of the appearance of suppuration. The thigh was swollen some, but not more than we expected to find it. The lower leg and foot not swollen at all—pulse 94, soft and regular—

countenance cheerful—moderate catharsis from the salts—appetite good, and no thirst. Continued poultice. Evening—no material change.

4th. Patient has slept but little through the night—does not know why; complains of but little pain in the left limb, and none in the sore; bowels moved once this morning; some thirst, urine scanty and high colored; tongue dry and slightly furred; pulse 104, soft and compressible; the sore white and clean, but no further indications of suppuration—feels very sore all over, but is in no great pain—dressed the sore with stimulating applications, and applied a bandage from the foot to the hip, with directions to remain quiet. Evening—no material change. Dressing not removed.

5th. Removed the bandage, and found the wound still white, with some increase of suppuration. Knee joint considerably swollen and painful; the thigh has become exceedingly painful, through the whole course of the rectus femoris, and the swelling considerably increased; pain in the left testicle and spermatic chord, and also in the hip joint; slept but little through the night; no appetite; pulse 160, still possessing the same soft compressible feel which has characterized it from the commencement of reaction; urine still high colored and scanty. The wound over the petella has never been, in the slightest degree, sensitive. In order to bring on a healthy action, we concluded to apply a strong lye poultice, which was done, and kept on through the day.

At about 10 o'clock at night, I was sent for to see the patient, and found, on my arrival, that he was suffering with excruciating pain in the left thigh, from the knee to the hip. I ordered warm vinegar to be applied freely, and gave him an anodyne, which gave relief, and he slept some through the night.

6th. 7, P. M.—Found the patient much worse; the thigh swollen to the hip joint, tense and exceedingly painful; the pain in the testicle and spermatic chord greatly increased; pulse 150, and hardly perceptible at the wrists; extremities cold; countenance cadaveric; voice changed and faltering; bowels tympanitic; breathing short and hurried; tongue dry and stiff; thirst, restlessness and fear of death. On examining the left thigh, distinct crepitation could be felt in several places, but more distinctly in the region of the rectus and vastii muscles, extending up to the superior portion

of the ilium. The case was now considered hopeless by all who saw it, including nearly the whole faculty of the place. We, however, did all that we thought would be of any service, and that was to stimulate the patient freely with brandy toddy—apply mustard poultices to the extremities, with warm rocks and frictions—an enema to move the bowels, and large doses of opium to lull the pain. The emphysema continued to increase rapidly, and by night had reached nearly the whole extent of the left side. The patient ceased to complain, and at 8 o'clock expired.

Sectio cadaveris twelve hours after death. The examination was made in the presence of all the medical gentlemen of the place, and of several students.

Appearances.—The body was extensively swollen, the penis and scrotum distended to the fullest extent. On the left side, from the knee to the top of the head, there were numerous emphysematous puffs—some of them under all the coats of the skin, but mostly under the epidermis. Immediately under the left eye there was a large puff, which, on being punctured, discharged a quantity of gas. The left cheek was also full of gas. The left thigh was examined—an incision extending from the antero-inferior spinous process of the ilium along the rectus femoris to the knee was made, and that muscle exposed. When the scalpel passed through the skin, which was very tense, an evolution of gas followed with a whistling noise, resembling the escape of wind from a distended hollow organ, when punctured. From Poupart's ligament to the knee, there was extreme hyperemia. The under surface of the skin and cellular tissue had much the appearance of a clot of coagulated blood. The rectus femoris presented the most remarkable appearance I have ever witnessed in a cadaveric examination. Its fibres were separated, and the spaces between them filled with gas. The other muscles when exposed, presented the same appearance. The capsule of the joint was laid open, and found full of serum; on turning up the petella, several ruptures were discovered, but there were no positive signs of inflammation in the synovial membrane. Below the knee there was no emphysema, and but little swelling. The right leg was of its normal appearance.

Abdomen.—The stomach and bowels distended with gas—nothing abnormal discovered in any of the viscera.

Thorax.—Nothing unusual found in this cavity. I thought it possible there might be fracture of some of the ribs, but found none.

I am perfectly satisfied that the emphsema was not produced by the introduction of atmospheric air through the wound in the knee, for the structures in that region are so dense that it would be difficult, if not impossible, to force it in with an instrument. The case to me, as well as the physicians who witnessed the examination, was unique, and the phenomena presented inexplicable.

I have never met with a case that bore any resemblance to the one which I have reported, nor have I any knowledge of such an one having been reported in any of the American journals, but I found in the analytical department of the American Journal of Medicine for 1833, several cases copied from a foreign journal, some of which presented appearances similar to this. The following bears the strongest resemblance.

"On the 25th February, Duclas, æt. 25, of strong constitution, had a very large tumor removed from his back; the tumor was very extensive, and the operation lasted forty-five minutes. There was great difficulty in securing the divided vessels, and the hœmorrhage was profuse. For a long time the patient remained in a state of alarming syncope.

"26th. Rather better, belly supple, retracted and not tympanitic. The trunk of the body and limbs were a little augmented in size, and crepitated upon being pressed; the impression of the finger was immediately effaced. The crepitation was so distinct that when the nurses were assisting him to rise from bed, they thought some of his bones were fractured; and the same noise contined until his death, every time he moved. * * * * * *

"*Dissection six hours after death.*—Emphysema less evident than during life, and only visible in the scrotum and the upper part of the thigh on the side operated upon. At these parts the skin was tense, and elevated by numerous small phlyctæna, close together and containing reddish serum. The flaps of the wound had not adhered to the parts beneath, they were livid and partially gangrenous. In every point of the cellular tissue when a bistony was introduced, gas escaped, and upon the approach of a candle there was a slight detonation, and it burnt with a brilliant flame of a bluish-white color, whiter at its base and bluer at its summit. The gas was completely inodorous. Muscular system healthy, but the color of the muscles not red as usual, and their fibres were separated by well defined intervals. When cut upon, the same kind of sound was produced as upon the division of muscles

that have been slightly frozen. When the muscles were pressed before a light, there was a sparkling and crackling like that which is caused by squeezing out the essential oil of orange peel before a taper. The abdomen was slightly tympanitic, and upon being punctured, and a light brought near, a clear and bluish smoke was seen, and the puncture was slightly enlarged by the combustion of its edges, which were also blackened."

I regret that I did not ascertain whether the gas in this case was combustible or not. It was but slightly odorous.

Several questions present themselves to my mind in reflecting upon the case. 1. What change took place in the parts that gave rise to the generation of gas? 2. Was it the mediate or immediate cause of death? 3. What course ought we to pursue in the treatment of such cases, whether stimulant or antiphlogistic? 4. Are not lacerated wounds of this kind much more dangerous than in cases where the muscular structures alone are involved?

SURGICAL AND OBSTETRICAL CASES.

BY A. B. CROOK, M. D., OF GREENVILLE, S. C.

When I first commenced the practice of medicine, I experienced much difficulty in effecting a reduction of such dislocations as fell under my observation; and whether it resulted from the inadequate advice derived from books—the imperfect instruction received from those who taught me *ex cathedra*—or my inability to comprehend the counsel of the former, or to enforce the precepts of the latter, I shall not now attempt to determine.

The practical suggestions I now wish to make known to the public, may, or may not, be orginal; this I am not fully able to decide, as my time has been so entirely occupied with the practical duties of the profession, that I have had but little opportunity to consult books; and my situation is in a mountainous region, and so remote from places of easy access to them, that it has not been in my power to learn all that is going on in the profession, even had I the time to consult them. Old or new, however, I trust they may prove useful.

When the usual arrangements for extension and counter-extension have been made, and the word is given for the assistants to act in concert, the muscles are instantaneously thrown into a state of violent and often spasmodic contraction, and this in so forcible a manner as to render it impossible to overcome it by any amount of force that could be applied, compatible with the safety of the patient. Independently of the obstacle thus thrown in the way of reduction, the pain which the patient is obliged to endure, is almost intolerable. Under such circumstances, the lancet, emetic tartar, warm bathing, weights, &c., are resorted to, by surgeons, for the purpose of producing relaxation. To these expedients, for several years, I have not found it necessary to have recourse. By throwing my patient off his guard, and using the luxated bone as a lever, I have failed in but three instances to accomplish all that, under such circumstances, could be desired. These were rather old cases of dislocation of the humerus at the shoulder joint, having continued from three to eight weeks before I was consulted, and therefore it was necessary, before the bone could be restored to its natural position, to break up the attachments it had formed with the parts that constituted its preternatural location. We will give a few cases in explanation of the plan which I follow.

Case 1st. In 1832, I was summoned to see Mrs. Col. E., who had been, for several months, in bad health. She was very feeble and emaciated. On my arrival, which was a little after dark, I learned that she had yawned in the early part of the afternoon, in which act the left side of the lower jaw-bone was luxated. Immediately after the accident, the family physician was summoned, who, after making various ineffectual attempts to reduce it, had me sent for. So unsuccessful had been the efforts previous to my arrival, that the lady had become very despondent under the impression that reduction was impracticable. I assumed a confident air—assured her there would be no difficulty in restoring the bone to its proper position; and finding that she expected great force would be applied, from the fact that it had been, in the many attempts that had been made before my arrival, and that this brought the muscles into a state of tension, I told her not to be alarmed, that I would not take her by surprise, but would give her due warning before I did any thing.

I wrapped my silk handkerchief well round the thumb of my right hand; stood at her right side as she sat in her chair; put my left hand on the upper and left side of her head, and pressed it gently against my breast; then introduced my thumb into the mouth, as far back between the jaws as I could, turning it as much as possible across the jaw. While the thumb was kept in this position, I traversed the jaw from the joint down to the angle, and from that to the chin, several times, with the fingers of the right hand. When the fingers would get round near enough to the chin for the purpose, I would bear down gently with the thumb, at the same time its cross position on the jaw made it a fulcrum on which the under jaw would act as a lever, whenever the chin was pressed up by the fingers. For the first several times these manipulations were attempted, I could feel the muscles of the neck attached to the jaw, as well as the masseter and temporal, become tense. As soon as I would discover this, I would desist, and assure my patient she had nothing to fear; that I would not hurt her, but that I could not examine so as to satisfy myself unless she held perfectly still. In a few minutes, convinced that I would not hurt her, she held entirely still, and then, by gradually pressing downwards with my thumb, upwards with my fingers placed near the chin, I reduced the bone with very little effort on my part, and no pain to my patient. At the same time that my thumb exercised some voluntary power in pushing downwards, it exercised much more by being used as a fulcrum, pressed against the upper jaw, on which the lower jaw acted as a lever. In this way I have reduced every case of luxated jaw-bone, that has been presented since, with very trifling effort on my part, and comparatively no pain to my patients. Nor have I ever experienced any injury to the thumb from the sudden jerk up of the under jaw, against which the operator is instructed to be on his guard.

In 1837, I was called to the shop of a very respectable physician in the village, to see a gentleman who had just dislocated his right shoulder by cracking a carriage whip. On my arrival, the Doctor informed me that he had seen the same bone misplaced several times before, and had always reduced it with facility by putting his heel in the arm-pit and pulling at the wrist;—that he had tried the same plan in this instance, several times, unsuccess-

fully. When I arrived, the Doctor was getting his bandages, and other apparatus, ready, for the purpose of producing, in the common way, extension and counter-extension. I proceeded to examine the shoulder, and found the head of the humerus thrown forwards instead of downwards, as I suppose it was when the Doctor had formerly reduced it, by putting his heel in the arm-pit. While I examined, the patient was witnessing the preparations that were being made for the application of force to the arm, and I urged him to hold very still, as I could not satisfy myself unless he did. I stood behind and rather to the right side (for it was the right arm that was injured,) put my left hand on the shoulder, placed my fingers against the head of the humerus, and my thumb on the opposite side against the connecting surface of the scapula. With my right hand I held the arm firmly just above the elbow. When I first took hold of the arm, the muscles of the shoulder were all spasmodically contracted; but by urging the patient to hold still, and gradually moving the arm in different directions, until my patient was off his guard, the muscles all relaxed; then fixing the patient's body, by placing my knee against his chest, I raised the elbow on a level, or near it, with the shoulder, and carried it gently forwards, while with the fingers and thumb placed as above designated, the patient, the Doctor and by-standers were surprised to find the bone righted without any apparent exertion on my part, and with but little pain to the patient.

In 1838, I was called in the night to visit Mr. S., fifteen miles from town, who had been thrown from a horse, by which his right hip was dislocated. I arrived a short time before day light; found Mr. S. in great pain and very great dread of the pain which he supposed reduction would produce. He complained excessively whenever the injured limb was touched. I remonstrated and urged him to be quiet, but in vain. The fear of pain and the irritability of the muscles about the hip, produced spasmodic contraction of them immediately, on any effort being made to replace the bone, which, it seemed to me, nothing short of horse-power could overcome. With the assistance of three or four gentlemen, I made several unsuccessful attempts to reduce the luxation. I was much fatigued from the ride and loss of sleep, and the efforts made at replacing the bone, exhausted me. I told

the patient that the bones could never be adjusted unless he would hold still when we made the attempt. Finding that soothing and encouraging language failed to have the desired effect, I determined to take the reverse course. I talked to him impatiently and ill-naturedly, charging him with all the blame of our unsuccessful efforts.

With a view to relax and quiet the muscles, as well as to appear indifferent whether I gave pain or not, I fastened a rope around the leg, just above the knee, and drew it over one of the joists of the log cabin, and pulled upon it until his body was something like half suspended. In this situation I left him, and lay down, pretending to be asleep, but really to devise some plan of reducing the luxated bone. By day light I was somewhat refreshed, and arose, pretending to be quite out of temper; took hold of the leg and moved it in different directions, regardless of the pain I gave him. In a few moments I found that fear of me was beginning to be my patient's ruling feeling, for he began to behave himself more quietly when I took hold of the limb. I called his attention to the fact that he was more tranquil, and urged it as an argument perfectly convincing to me that he could hold still if he would. This, with the encouragement I gave him that all could be put right, with but little pain, if he would do as he was told, enabled him to be still. He was lying on a bed on the floor. I moved my chair close to him, put my left knee against his right ileum; placed my right knee in the ham of his right leg, and took hold of his ancle with my right hand. In this way, with my left knee holding him to the bed; his thigh flexed on the body; his leg flexed on the thigh; my knee in his ham as a fulcrum, on which I used his leg as a lever with my right hand; he holding as still as he could, the bone was replaced in two or three minutes, with very little pain indeed.

Two weeks ago, I was called to see a stout, athletic black man, the ostler at the Planter's Hotel, in this town, who had, a few moments before, in a scuffle with an unruly horse, dislocated both bones of his right arm at the elbow. I found him in great pain. He, too, could not bear me to touch his arm, for the injured muscles were, by the slightest motion, instantly spasmed. I took hold of the arm just above the elbow joint with my left hand, and his

wrist with my right. He was swinging his body in various directions from the pain, therefore an assistant was directed to hold him, so as to keep his body steady. I placed my left foot on the round of a split-bottomed chair, so that his elbow would rest conveniently on my knee. In this position, I moved the fore arm on the arm in different directions, until the patient was enabled to hold still. I then flexed the arm very gently until it was square with the elbow, and while I pulled forward very gently and steadily with my right, I pushed back as firmly as I could with my left hand, gradually increasing the force of each, and the bones were immediately replaced.

The cases above recited, I have selected as best suited to illustrate my plan of proceeding, and the principles on which I act.

On the morning of the 22d of February, 1842, I was called in haste to see a negro woman belonging to Mr. A. Green, three miles from town, who had been in labor about twenty-four hours. She was a stout, hearty looking woman, about 22 or 23 years old; had been delivered of two children before, in the last four years, both of whom were very stout and healthy looking. The labor pains had entirely subsided before my arrival. I immediately examined her, and found a large tumor protruding from the vulva, which was circular with an aperture in the centre, sufficiently large to admit two fingers. The mouth of the womb could be distinctly felt through the opening. The finger could be passed easily around the tumor between the vulva and the vagina. I was told the woman had frequently strained herself in putting large logs of wood on the fire. The tumor first made its appearance a month or so previous, in one or two hours after having dragged some very large logs. Her back had been weak. The tumor had been sometimes discoverable and sometimes not, and a source of great uneasiness and anxiety from that time. Soon after the labor commenced, the tumor again appeared, and in a few hours attained the above unusual dimensions. There had been no labor pains for the last several hours, and the patient had given up to die. The examination satisfied me that the tumor was the distension of the inner coat of the vagina, either with blood or serum. The woman's bowels were empty; the mouth of the womb open and relaxed, and the head of the child presented. I encour-

aged her to believe I would soon be able to relieve her; gave her a tea-spoonful of the spirits of lav. comp., and squeezed the tumor gradually and firmly. In the course of an hour the mechanical pressure of the hand had so far reduced the size of the tumor, that I passed it back into the vagina, though at first it had protruded several inches through the vulva, and it was as much as I could grasp. The tumor was not sore, and pressure gave no pain. After I had placed it as high up in the vagina as I could, I then commenced distention and pressure, by passing my fingers through the aperture into the mouth of the womb, and continued it firmly. Pursuing this policy, giving occasionally a tea-spoonful of lavender or hartshorn, to keep up the excitement, and encouraging my patient, she was, in about three hours after my arrival, delivered of a fine large boy. The mother and child did well. About the middle of March I called and examined my patient, but no vestige of the tumor could be found.

I have reported this case, because I have seen but another one like it; if I have ever read of a similar one, I have forgotten it; hoping that it may, possibly, prevent some one of the profession from losing a patient as I did, some four or five years ago, that might, most probably, have been saved.

The following are the particulars of the case above referred to. In 1837, I was called to see a negro woman of Mr. Wm. Bowen's, about eight miles from town. I found her in precisely the situation described in the foregoing case. The tumor—its size and character—presentation of the child—dilatable condition of the mouth of the womb—despondency of the patient, and subsidence of pain—all the same. I was, at the time, very busy in practice, and, after having given a dose or two of hartshorn without increasing the pains, I gave her a quieting dose of laudanum, and left the patient in the care of a midwife, *who was considered safe.* I directed that when her pains came on, I should again be sent for—not doubting that, after a few hours repose, my patient would be revived and the pains renewed. I heard nothing more of the case for two or three days. The first leisure hour, I set off to inquire what had been the result, and, about four miles from home, I met one of the family, who informed me that the woman had died the next evening after I saw her. The pains had not returned, and the woman had gradually sunk from the time I left her.

In both cases, all the labor pains, previous to my arrival, had been inefficient.

I think now if I had staid with Mr. Bowen's woman, and used the same means, *moral*, *medicinal* and physical, that I did with Mr. Green's, I should most probably have had the pleasure of saving my patient. I believe the despondency of the woman at Mr. Bowen's, had much to do with the fatal termination of the case; and I am satisfied the profession cannot pay too much attention to the mental state of their parturient patients.

A CASE OF LACERATION OF THE WOMB,

WITH ESCAPE OF THE CHILD INTO THE ABDOMEN; DELIVERED BY THE CESARIAN OPERATION.

BY N. L. MC'GUIRE, M. D. AND B. W. GROCE, M. D.
Of Talladega County, Alabama.

Huldah, a negro woman belonging to Mr. Robert Jemison, of Talladega county, Alabama, in her fourteenth pregnancy, was taken with parturient pains on the evening of the 22d of June. Being sent for immediately, I was informed by the attendant female, that the pains were slight and irregular. I made no examination, but directed the nurse to inform me should the pains increase.

Huldah informed me, that in assisting to clear some new ground, she, in lifting a log, felt something (as she expressed it,) "give way" in her right side, which afterwards became painful, and continued so throughout her pregnancy, gradually extending over the entire abdomen, from the right iliac region.

23d. On visiting the patient this morning, I noticed some slight parturient effort, attended with considerable pain in the right iliac. I attempted an examination per vaginam. She complained of such intense soreness, that the examination was not satisfactory—the os tincæ not being felt. The nurse informed me that she had had an escape of water three or four times, per vaginam. This account, together with the extreme tenderness of the abdomen, and vaginal soreness, brought me to the conclusion that something unusual existed in the case. Her pulse was full and strong, veni-

section about xiv. oz. Three hours after, pulse still full, with some dropsical appearances of the extremities. The vein was reopened and she was blooded about x. oz. An hour or two after the last bleeding, the pains slightly increased, for a short time, and then gradually subsided.

24th. Labor pains entirely ceased; great tenderness of vagina and abdomen. Called in consultation Dr. B. W. Groce. There had been no evacuation from the bowels since the commencement of labor, owing to the mechanical obstruction offered by the child. This we endeavored to obviate by the administration of large doses of oleum ricina, assisted by stimulating emmeta. After waiting several hours, the bowels became active; we then endeavored to make a more thorough examination, the soreness, however, still extreme. The hand was partially introduced; the os tincæ not discovered, but felt some portion of the child, supposed to be the head, lying low in the upper strait, inclining to the right iliac. The abdomen considerably enlarged within the last twenty-four hours; still no uterine contractions.

25th. No pain through the night, nor any to-day; pulse becoming rapid and thready; lower extremities cold.

26th. Patient continues to sink; frequent evacuations of a serous character. P. M. pulse 150; 8½ o'clock determined on and performed the Cesarian operation, by making a longitudinal incision, extending from the pubis (in the direction of the linea alba,) one and a half inches above the umbilicus. When the incision reached the cavity of the abdomen, bloody serum gushed out profusely, accompanied with the smell of putrefaction. The finger was immediately inserted, and the extremity of the child felt. The incision being enlarged, the child was plainly seen, above and posterior to the fundus of the uterus, with its head directed towards the right iliac region. After extricating the child,* the cord was traced and some force exerted, which brought up *the placenta* from behind the fundus of the uterus, and from towards the transverse position of the colon. After sponging out the blood very carefully, the edges of the wound were brought together with the utmost accuracy by eight stitches of the interrupted suture, supported by adhesive straps; a compress and large roller bandage

* The child was in a state of decomposition, and we supposed it had been dead five or six days.

around the abdomen; for the escape of any fluid that might remain in the abdomen, or the secretion of pus, the lower angle of the wound was left open for the space of half an inch or more. The patient was then placed carefully upon her back, and every effort used to render her situation as comfortable as possible, and to obviate the least excitement. Visited the patient at 10 o'clock, and found her pulse 120, and lying perfectly easy.

27th. Patient rested well during the night; pulse this morning 125; abdomen considerably swelled; frequent evacuations, checked by anodyne enema. P. M. pulse 150; tympanitis increasing.

28th. Last night considerable delirium; patient was very restless, frequently starting up in the bed; extremities, this morning, cold, and pulse can scarcely be felt at the wrist; stimulants used freely, with sinapisms to the extremities; no reaction. A. M. 9 o'clock, patient died.

Post mortem examination—developed the peritoneum considerably thickened, with a portion of the large intestines attached to it. The fundus and anterior portions of the uterus had also formed adhesions to the peritoneum on the right side of the incision. The womb was considerably enlarged, with its blood vessels very much injected; on laying it open with the scalpel, we discovered, at his lower and posterior portion, an opening, into which we introduced three fingers, presenting rather a ragged appearance. Our examination was prosecuted no farther.

Remarks.—Immediately after, and even previous to, delivering the woman, we were under the impression that it was a case of extra-uterine pregnancy, and we should have retained that opinion, had not the post mortem examination developed a rupture of the uterus. We are, however, now convinced that there was, during the first hours of parturiency, a laceration of the womb, and an escape of the child into the abdomen.

TYPHOID FEVER IN A PATIENT SIXTY-THREE YEARS OLD.

BY ELISHA BARTLETT, M. D.

[Communicated for the Boston Medical and Surgical Journal.]

On Wednesday, the 24th of August, I was invited by Dr. Butterfield, of this city, to attend the examination of a female subject, sixty-three years old, who had died twenty-four hours previously under the care of Dr. Huntington. Dr. Huntington was unable to be present. Dr. Butterfield had seen but little of the patient; and from the very partial history, which we had then had of the symptoms, we supposed it most probable that the case had been one of disease of the brain. As the case is one of considerable interest, I shall report it in the order which, under the circumstances, we were obliged to pursue, in its investigation and diagnosis.

The organ first examined was the brain. We found, here, moderate venous congestion, and pretty abundant sub-arachnoid serous effusion. The ventricles, also, contained from half an ounce to an ounce each of clear, colorless serum. The color and consistence of the brain were in no way obviously changed.

The adipose tissue upon the abdomen was from an inch and a half to two inches in thickness; and the omentum was very much loaded with fat. The large intestine was fully distended with flatus, and the small intestines moderately so. The kidneys were somewhat softened, perhaps, but in no way very obviously altered from their natural condition. As soon as the small intestines were exposed, I was struck with the very marked, dark-colored appearance of several of Peyer's glands, and with their very manifest thickening; and I remarked to Dr. Butterfield, that, unexpected as the discovery might be to us, we were likely, I thought, to find the lesion of typhoid fever. A portion of the lower part of the ileum, about seven feet in length, was removed from the body, slit open, washed, carefully examined, and notes of its condition taken at the time. Eighteen inches from the upper end of the removed portion we found a small oval patch very considerably thickened, with prominent edges, and its surface roughened and

abraded. At the distance of two inches from this we found another and larger gland, more thickened than the first, and of a mottled red color. Then, at intervals of from two to fifteen inches, until arriving at within a foot of the ileo-cæcal valve, we found eight elliptical plates, several of them quite large, one of them two and a half inches long by one inch wide; more or less extensively diseased. Most of them were of a dark-red color; they were much thickened, with prominent edges; some of them were extensively and deeply ulcerated, besides being the seat of the peculiar yellow deposition or degeneration so common in this lesion. The last ten or twelve inches of the intestine were thickly scattered over with smaller and somewhat more irregularly-shaped patches, in a condition similar to those which have just been described. This state of things terminated abruptly at the ileo-cæcal valve. Several of the isolated follicles of the ileum were red and thickened. The intervening mucous membrane was but little altered from its natural state. There were a few isolated follicles of the cæcum slightly prominent and reddened. The contents of the intestines were yellow and pultaceous. Several of the mesenteric glands, corresponding to the lower extremity of the ileum, were much enlarged, one of them to the size of the end of the thumb, softened, and of a reddish-yellow color. The spleen was enlarged, dark and softened. The consistence of the liver, also, was very decidedly diminished. The upper portion of the alimentary tube was not examined.

The heart was softened, somewhat, though otherwise natural. There were no pleuritic adhesions, and the entire lungs were perfectly healthy, excepting that the lower and posterior edge of the right lung had undergone the kind of *carnification* common in typhoid fever. It was of a dark, bluish-red color; wholly destitute of air; not granular or hepatized; with a tough, flabby texture, not easily torn or penetrated by the fingers.

Here, then, was a case, so far as the evidence to be derived from the morbid appearances of the organs could settle the question, of typhoid fever; not doubtfully or vaguely, but, on the contrary, very clearly and unequivocally marked. It remained to be seen, whether, contrary to what we had been led to suppose, this diagnosis, founded exclusively upon the autopsy, would be justified by the history of the case during life. On inquiry of the friends of

the patient, and of her physician (Dr. Huntington,) it was found that she was attacked on Monday, the 15th of August, after breakfast, with severe pain in the head; and that she complained of being very cold. She ate no dinner, but kept about during the day. Through the night she was dozy, but restless; and during the whole of the next day, she remained in bed, with increasing headache, and with pains over the whole body, but especially severe in the back and hips. She had no appetite, was thirsty, and inclined to sleep, though restless. This state of things continued through Tuesday night, with the addition of slight wandering delirium. On Thursday evening there was much increase of the somnolence, so that for some hours she could not be roused. From this period up to the fatal termination of the case, there was drowsiness, dizziness, restlessness, constant pulling at the bedclothes, delirium; and marked rigidity of the muscles of both arms, constituting, as is now well known, an almost invariably fatal symptom in this disease. For the last few days there were four or five liquid discharges from the bowels daily, of a dark yellowish color. The pulse was rapid, and during the last four or five days, irregular and intermittent. The tongue was nearly natural throughout the disease. Death took place about noon on Tuesday, the 23d of August, eight days from the commencement of the fever.

This patient had been residing, since the first of March, about seven miles from her usual home, in a neighborhood where typhoid fever had been somewhat prevalent during the summer. One of her own grand-children was sick with the disease from the 8th to the 21st of June, in the house where she lived.

The principal interest of this case is connected with the age of the patient. It is now well settled that typhoid fever is, in a great majority of instances, a disease of early life. Of one hundred and thirty-eight cases, the histories of which are analyzed in Louis's Researches, only ten were over thirty years old, and no one was over forty. Of one hundred and forty-seven cases cited by Chomel, only six were over forty years old, and only one was over fifty. The last mentioned observer says, in his Clinical Lectures on Typhoid Fever, published in 1834, that, so far as was then known, no case had been seen in which the patient was over fifty-five years of age. The alleged instances, reported by Andral, are

none of them authentic cases of the disease. Of two hundred and ninety-one cases analyzed in Dr. Jackson's report, only sixteen were thirty-five or upwards. The extreme age is not mentioned. In a memoir by Gendron upon this disease in one of the French provinces, three cases are mentioned in which the patients were between fifty and sixty years old; and four in which they were between sixty and seventy-five years of age. I have ventured to make the suggestion, in a work upon this disease and upon typhus fever, now in the press, that typhoid fever may be found to occur more frequently after the fortieth year of life in the country, than in large towns and cities. This question can be settled only by the careful observations of the future; and be it as it may, I have thought it worth while to place on record the present *authentic and unequivocal example of typhoid fever, or dothinenteritis, occurring in the country, in a patient passed the sixty-third year of life.*

Lowell, August 27th, 1842.

BIBLIOGRAPHICAL NOTICES.

The History, Diagnosis, and Treatment of Typhoid and Typhus Fever; with an Essay on Bilious Remittent and of Yellow Fever. By Elisha Bartlett, M. D., Professor of the Theory and Practice of Medicine in Transylvania University. Philadelphia: Lea & Blanchard. 1842. 8 vo., pp. 393.

The work of Professor Bartlett, to which we referred in the last number of this Journal, has been before the public several weeks; and besides its many and great intrinsic merits, we take occasion here to say, that we are glad it has been got up in a style so handsome that it must prove highly gratifying to the author as well as creditable to the publishers.

This volume is the result of the leisure of the author during the summer and autumnal months spent by him at the North; which the reader will observe, as he peruses it, was not altogether engrossed with bibliographical researches into the history and nature of the forms of fever of which he has treated. With his charac-

teristic ardor, he engaged in the practical duties of the profession, whenever opportunities offered that promised to give him a further and deeper insight into those diseases that were then subjects of special study. The first and most valuable half of the volume is occupied with a full, faithful and exceedingly satisfactory account of Typhoid Fever. At this we are unfeignedly gratified, for we presume there is no region of country in the United States, in which such a treatise is calculated to do so much good as that which is called the Valley of the Mississippi. Medical men have been so completely led astray by systematic views of disease, that their notions of many of the varieties of fever are incredibly vague and indefinite. The cause of this is obvious enough; they have been taught that every thing that is morbid, is the result of congestion, and so constantly is almost every imagination haunted by that phantom, that it seems impossible for its infatuated disciples to see any thing else, or to believe any thing else can exist.

It is to be hoped, however, that the accurate and finished history which Professor Bartlett has given of Typhoid Fever, will challenge attention and lead physicians to examine into the nature of their cases and pause before they pronounce upon their character, and long and deliberately, before they conclude them to be congestive. With the form of fever that is manifestly congestive, we profess to have contracted some personal acquaintance in the Southern States, and we feel authorized to say, as we have repeatedly before, that it has never prevailed to any extent, if at all, in this part of Kentucky. In this opinion, we do not stand altogether alone, although it is undeniable that the great body of physicians have thought and acted differently. Nor has the Bilious Remittent Fever prevailed since 1830, to any thing like the extent which it did before that time. The fever that has been most prevalent and most fatal, has been Typhoid Fever, and if those who think differently will study, as they should, the work of Professor Bartlett, they will at once be convinced of the great and fatal error under which they have acted. Typhoid is a well characterized variety of fever, and once its peculiarities are thoroughly understood, it will be difficult to confound it with any other disease; and this we are particularly solicitous should become generally the case, as then physicians will be convinced that the

position we have assumed for the last six or seven years, is the only true and tenable one.

What, however, has been the result of the misapprehension under which physicians have labored? Most fearful, indeed. The mortality from fever has been much greater, we are persuaded, than it would have been under a more correct view of the subject. Believing that, like certain other varieties of fever, it could be cut short, the most active and perturbatory modes of medication have been zealously enforced, and these have generally converted mild into malignant cases of fever. It has been thought that nothing less than repeated vomiting and almost constant purging were adequate to encounter, with success, so formidable an antagonist; when, in truth, had it been met by *la medicine ex pectante*, it would have been, in most cases, easily vanquished.

Typhoid Fever was witnessed by us in the hospitals of Paris, and when we returned to Kentucky, in 1834, we soon met with our old Parisian acquaintance, and so pronounced it; and every year since, we have seen more or less of it; and that we were not mistaken, is almost conclusively proved by the fact that similar cases of recent occurrence have been visited and examined, at our request, by Professor Bartlett, and he has unhesitatingly expressed himself of the same opinion. Now, if this be the fact, those physicians who entertain different sentiments, will not consider us over-officious in pressing upon them the great and instantaneous importance of putting themselves in possession of the book of Professor Bartlett, and also of studying closely and thoroughly, at least, that part of it that relates to Typhoid Fever. In it they will find no absolutely new views, but they will find that which, perhaps, is of much more importance;—they will there find stated, in a clear manner and in a natural order, all the facts that have been positively ascertained in regard to it; a knowledge of which cannot fail to prove of infinite advantage to the busy practitioner, who may not have time to consult more voluminous, or to study more original works.

In regard to the latter half of the treatise of Professor B., we are not prepared to speak in terms of such decided approbation. We do not mean to say that it does not evince as much research, talent and learning, as the former—for in all these respects it is as creditable as he could desire it to be—but we do mean to say, that

he holds several tenets to which we cannot subscribe. This we regret, because we know it is hazardous to differ with so accurate and philosophical a thinker, while we are satisfied his liberal and catholic temper of mind will consider it no offence to say, that the distinction he draws between Bilious and Yellow Fever, and the ascription of the latter to contagion, do not accord with the conclusions which our researches induce us to consider authorized. These points, however, together with some others, involve mere matters of opinion, and do not, perhaps, impair the practical value of the work; and we should, therefore, be pleased to see it in the hands of every physician in the Western and Southern States. Independently of points of doctrine, in regard to which much discrepancy is to be expected, the work, throughout, is worthy of an attentive study, and the spirit in which it was evidently written, should be cultivated and imitated by all. In the discussion of every question, there is a candor and fairness which evince most decidedly, that the author's only desire was to arrive at the truth. If there is any fault in it, it is not of the heart, but of the head; he seems to have had no ambitious or selfish wishes to gratify—no exclusive views to diffuse and popularize—but we do think that he occasionally betrays too great a partiality for French authorities, and too great a confidence in French modes of investigation. This, too, is a matter of opinion, and time only will be able to refute or confirm it; and therefore we say let the book be studied; let both old and young—at least in this region of country—study it carefully, before they venture again to say they have lost patients by *Congestive Fever.*

The Principles and Practice of Modern Surgery. By Robert Druitt. From the second London edition. *Illustrated with fifty wood Engravings, with Notes and Comments.* By Joshua B. Flint, M. D., M. M. S. S., Lecturer on Therapeutic and Operative Surgery in the Louisville Academy of Medicine, and late Professor of Surgery in the Medical Institute of Louisville. Philadelphia: Lea & Blanchard. Louisville, Ky.: Morton and Griswold. 1842. 8 vo., pp. 534.

Having attentively perused the Surgery of Mr. Druitt, we are disposed to speak of it in terms of commendation; and as no language we can employ will more nearly express our estimate of it

than that used by Dr. Flint, its able editor and annotator, we quote the following from what he has said on the subject:

"The American Editor of the present volume can claim but little participation in the merits of it beyond what is due to an early appreciation of the excellencies of Mr. Druitt's book, and an earnest and successful effort to procure its re-publication. Upon a thorough examination of it with a view to this undertaking, it appeared that its author had been so eminently successful in collecting and arranging whatever could be introduced into such a work with advantage, so as to forbid any aspirations for the honors of authorship to a revising Editor, even in the humble offices of annotation and commentary, and he engaged in the enterprize ambitious only to be instrumental in introducing to his profession in this country, and especially in the west, the best compend of the principles and practice of surgery extant.

The only work of the kind, to be compared with it, is the admirable Dictionary of Mr. Samuel Cooper, and though a high compliment, it is not an undeserved one to this volume, to say that, in view of its final purpose and uses, it is, in many respects, entitled to a preference. Mr. Cooper's disquisitions—historical and speculative—on various subjects, though always learned, ingenious and interesting, are frequently too elaborate and discursive for a book of practical reference, and the substance of them may generally be found in brief and comprehensive paragraphs, by Mr. Druitt, and accompanied by such ample bibliographical references as will enable the surgical student to prosecute his inquiries under the light of the best guides and authorities which the science can supply. The systematic and methodical arrangement of topics in one volume, while it may be a little less convenient in a *manual* for the practitioner, than the alphabetical order of the "Dictionary," nevertheless contributes essentially to its excellencies as a *text-book* for the student. In this respect it will be found to answer an important desideratum in the apparatus of teaching, and cannot fail to become a favorite as well with Professors of Surgery as with their pupils.

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"A few brief notes of a practical character, the transposition of two or three sections, and the *change of name*, from "The Surgeons Vade Mecum" to the one now substituted—comprise the only material alterations on which he (Dr. Flint) has ventured. The latter alteration was made partly as a matter of taste, but chiefly upon considerations of significancy and pertinence. "Vade Mecum" is a title by no means expressive of the true character of this work—it indicates indeed, the modesty of its author, but is far from comporting with the real dignity and merit of his production.

"THE PRINCIPLES AND PRACTICE OF MODERN SURGERY" is certainly a significant title for a book which, like the present, is a faithful codification of the opinions and practice of Hunter, Pott, B. Gooch, Abernethy, the Bells, Physick, Dupuytren, Hennen, Macartney, Larrey, the Coopers, Scarpa, Lawrence, Liston, Guthrie, Mayo, Brodie, Carmichael, Warren, Wardrop, Key, Travers, Dudley, Breschet, Tyrrell, Green, Dieffenbach, Civiale, Leroy, Arnott, Barton, Ricord, Colles,

Stanley, and most of the other distinguished surgeons who have flourished since the commencement of the Hunterian epoch. Without any of the adventitious aids to which most publications of the day owe their success—the previous heralding, and subsequent puffing which are usually in requisition at a literary début—without the prestige of rank or official distinction on the part of its author, the "Vade Mecum" has secured an extraordinary popularity in Great Britain, and the most flattering commendations of medical critics."

MONTHLY PERISCOPE.

On Benzoic Acid in Urinary Disorders. By JOHN SMITH DODEN, Surgeon to the United Hospital, Bath.—In the last volume of Medico-Chirurgical Transactions, there is a paper by Mr. Ure on gouty concretions, in which he states that most unequivocal proofs have been afforded him of the efficacy of benzoic acid in correcting and removing certain disordered states of the urine in individuals prone to attacks of gravel. In the "Provincial Medical and Surgical Journal," of February 16, 1842, Dr. Walker, of Huddersfield, published an account of the advantage he had witnessed from the use of benzoic acid, combined with balsam of copaiba, in certain affections of the urinary organs. Dr. Walker's statements induced me to adopt his practice, and the first favourable opportunity of testing its efficacy occurred a few days after I had read Dr. Walker's paper, when I was summoned to an elderly gentleman who had long suffered from irritable bladder and enlarged prostate. Three years ago I saw this patient on account of retention of urine. I was then informed that, for a considerable time, he had frequent inclination to pass urine which was generally loaded with mucous secretion. I found enlargement of the prostate, but had no difficulty in passing a catheter; I emptied his bladder, and the urine drawn off contained a considerable quantity of muco-purulent deposit. The catheter was passed daily, and the bladder washed out with warm water; the hip-bath, with rest, and the means ordinarily adopted in such cases, soon mitigated the severity of this attack. The patient acquired the power of introducing the catheter himself, and has used the instrument, I believe, daily ever since that period. I occasionally felt the instrument strike against a calculus, but the state of the prostate, and advanced age of the individual, rendered an operation inadvisable.—During the three last years he has taken most of the remedies generally recommended on such occasions, and thinks the uva ursi has been most serviceable to him. He has not, for a long time, been under the care of a medical man, but trusted entirely to his own management, till I was sent for in March last, in consequence of aggravation of suffering. He showed me the urine he had recently passed and drawn off.

It deposited a large quantity of muco-purulent discharge. He complained much of the irritability of the bladder. I injected warm water, and, as on former occasions, he had derived more benefit from the exhibition of uva ursi, than from any other remedy, I prescribed that medicine, together with the use of the hip-bath, and a suitable regimen; as no material relief ensued at the end of three days, I directed the benzoic acid in the following form:—Benzoic acid, one drachm: Balsam of copaiba, half an ounce; Yolk of egg, enough to form a mixture with seven ounces of camphor mixture. Two tablespoonfuls to be taken thrice a-day.

I never witnessed anything equal to the efficacy of this medicine; the urine became clearer after the first dose, and in two days it was perfectly clear from mucous deposit; the irritability of the bladder was lessened, and in four days the patient resumed his self-management. I did not feel the calculus during this attendance. The gentleman left Bath about six weeks after this period. I saw him a few days before his departure; he told me that he was as well as usual, that he continued to use the catheter, but that the urine was quite clear, and that when he observed any tendency to mucous deposit he had recourse to the mixture, and always with success.

The result of this case induced me to give the medicine a trial at the United Hospital, and our intelligent house surgeon, Dr. Morgan, has been kind enough to give me the heads of four cases in which it has been exhibited at that institution.

Case 1.—A man aged thirty-five, applied for admission as an out patient, complaining of frequent desire to make water, which has existed for the last month; the urine deposits mucous sediment; the patient has no gonorrhœa, and refers his disorder to being much exposed to cold and wet. On passing a catheter the urethra was found perfectly natural, but there was some slight hæmorrhage after the urine had been evacuated; has some pain in the loins; pulse rather strong; was at first cupped on the loins, and ordered aperients; and then diosma and the pareira brava, with opiates, were given in succession. After having attended for three weeks, he complained of some pain in the joints, for which he was ordered colchicum, and though it greatly relieved the rheumatic affection, produced no beneficial effect upon the state of the bladder. Mr. Soden saw him, and directed the mixture, with benzoic acid and balsam of copaiba. He found benefit after using it for two days, and in ten days was perfectly well.

Case II.—A married woman apparently in good health, was admitted as an out-patient, stating that she had frequent desire to make water; the urine depositing on cooling (she says) a whitish sediment; urine slightly acid; she has been under medical treatment at intervals during the last six months, but without deriving any benefit from the means adopted. The mixture, with benzoic acid and balsam of copaiba, was ordered immediately, and she was discharged, cured, in three weeks.

Case III.—A man, aged fifty, has been under the care of two surgeons for a month, owing to having suffered irritability of the bladder. He has now frequent desire to make water; a small quantity of blood is occasionally passed with the last drop of urine; some ropy mucous

is deposited in the urine, which is slightly acid, though it very soon becomes ammoniacal on standing; there is some irritation at the glans penis; on sounding, no stone could be detected. He was ordered the benzoic acid mixture, but only continued his attendance for three visits (eight days,) during which time great relief was afforded, and as he has not since applied at the hospital, he is most probably well.

Case IV.—A man, aged thirty-seven, after a severe attack of gonorrhœa, which appeared, by his description, to have been attended with acute inflammation of the bladder, was admitted an out-patient. He complains of being obliged to make water very frequently, having to get up six or eight times in the night to empty his bladder; has much pain in front of the pubis; some ropy mucous is deposited in the vessel, after the urine has been standing some time. After trying several other remedies without advantage, the benzoic acid mixture was ordered, from the use of which he experienced great relief in two or three days, and at the end of ten days no mucous was discovered in the urine.

The most remarkable circumstance connected with the exhibition of this medicine, as far as my experience goes, is its decided efficacy in diminishing, and in some instances, completely suppressing the mucopurulent deposition in the urine, which is so prominent a symptom in most cases of affection of the bladder. I am aware that a doubt may be very fairly entertained whether this effect is to be attributed to the benzoic acid, or to the balsam of copaiba, or to their combination. In the few cases which I have just related I was induced to give both of these medicines, from the advantage which had been derived from their use in Dr. Walker's practice. It is, however, very desirable to ascertain the effect of benzoic acid alone in similar cases, more particularly as balsam of copaiba so frequently disagrees with delicate stomachs. I shall therefore not fail to avail myself of future opportunities of trying it, uncombined with other active ingredients; and the hope of inducing my brethern of the Association to endeavour to establish the real worth of a remedy that promises to be serviceable in a very formidable and distressing class of complaints, has been my principal motive in occupying so much of the time of the meeting.—*Prov. Med. Journal.*

Tendency of Bad Living to produce Chorea. By Dr. W. D. Crowne. Chorea is frequently attributed, and with great justice, to bad and insufficient diet; that diet not sufficiently nutritious may, by producing debility, lay the foundation for chorea, we may be assured; but it is necessary not to lose sight of another fact, that good and sufficient diet may, in a defective state of the health, fail to afford good and sufficient nourishment; for it is not enough that proper food should be taken into the stomach, but it is necessary also that it should be properly dealt with when there, lest it should be converted into what is not merely without elements of a nutrient quality, but lest it should be converted into elements that are noxious. It is scarcely possible in practice, whether with regard to children or with regard to adults, to give this fact too much consideration. We perceive that all the three patients to whom I have directed your attention, had good and sufficient food.

including meat once every day. In one instance (the girl) the appetite was good, and there was no sensation of indigestion until just prior to her coming into the hospital. In another (Godfrey) the appetite was delicate, but the digestion, so far as the patient's sensations were concerned, seemed not to be good. A third patient (Watson) had a good appetite, and he did not have any sensations, leading him to consider that his digestion was defective; yet in all these the dejections, when active purgatives were given, proved to be unnatural; and one patient, the girl, says, that although her appetite was good, and before she had any feelings of bad digestion, yet even under these seemingly satisfactory signs, she had observed that what she took passed undigested. We have in this particular, demonstration in our three little patients of that which so often happens, and lulls persons into false security, assuming that the vital functions are all going on healthy, because there is no striking, flagrant, self-evident demonstration of the contrary

London Lancet.

Since 1830 we have been fixed in our hostility to the *diete absolue* so rigidly enforced by Broussais and his followers, and every day brings to light new proofs of its prejudicial effects. Scarcely a periodical, or a new work on any medical subject, reaches us, but contains a direct or indirect protest against it; and we constantly meet, in practice, with additional evidence of the evils that result from insufficient or improper nourishment, and there cannot be a doubt that the ascription of chorea, in many instances, to the one or the other, is correct. We have often seen cases in illustration and proof of it.

In the treatment of chorea, physicians have relied too exclusively on purgatives or tonics. Neither of these classes of medicines, used separately, will generally succeed. We purge with calomel, rhubarb, aloes, scammony, etc. until the chylopoetic secretions are corrected, and this we ascertain by the stools, which are then of healthy color, odor, and nearly of healthy consistence, and then give tonics, generally chalybeates, and solid nourishment, that is easy of digestion. Purgatives, unsucceeded by tonics and proper food, leave the patient liable to relapse, and tonics given before the rectification of the chylopoetic secretions, are always very tardy in producing any good effect, and they have very generally, in our practice, proved altogether useless. Ed. Recorder.

Treatment of Varicocele. By M. Valpeau.—[This disease which consists in a dilation of the veins of the chord, is treated in various ways by different surgeons, and very much according to the peculiar treatment of varix, which each surgeon adopts. Cumano employed the

ligature and extirpation at the same time: Mr. Warren excised or tied the varicose veins of the scrotum: M. Moulinié combined excision with ligature: Delpech divided the scrotum, exposed the chord, and tied or incised the veins; in some cases he passed a small bit of sponge under the dilated veins and fixed it with strips of sticking plaster—it is said he cured six out of seven patients in this way. We should, however, beg leave to doubt the truth of this assertion. Bell has tied the spermatic arteries for this affection. Within the last ten years several new methods of treating this disease have been tried, all based on the results obtained from M. Velpeau's experiments on the acupuncture of vessels. This eminent surgeon adopts the following method:—]

My process, says he, consists in passing a needle underneath the vein, and twisting a ligature round its two ends, so as to compress the vessel in a circular manner. The patient is placed on his back, the scrotum shaved, and the vas deferens held aside. I then seize the scrotum from behind, and with the thumb and index finger of the other hand I bring the mass of varicose veins forward towards the integuments, and fix them in a fold of skin; an assistant holds one end of this fold, while I support the other. I then pass a needle under the veins, in the way described for varix, and bring a ligature round it; a second needle is passed within about an inch of the first one. You must avoid inserting the needles too low or too high, and separating them too far from each other. If the lower needle, for example, be placed too low down, you may wound the tunica vaginalis; if the superior needle be inserted too high up, you will have difficulty in separating the veins of the chord; finally, if the needles are placed too close to each other, the two wounds may unite and form one. The needles being placed, the ligatures are wound circularly round them, in the same way as for varix of the lower extremities; I need not, therefore, detain you with a description of details which you have heard so lately. When the eschars are detached, the needles are withdrawn from the tenth to the twentieth day. Unless the inflammation which supervenes be severe, the patients are not confined, and a cure takes place in about a month. I have never seen phlebitis occur after this operation; in two cases, however, where the inferior needle was inserted too low down, inflammation of the tunica vaginalis came on. The whole of my patients, then, were cured in a short time; and, of those whom I have since met, not one has suffered a relapse. This, perhaps, may be accounted for by the fact that in varicocele the chances of radical cure are much greater than in cases of varix of the lower extremities, because the free anastomosis between the veins is absent.—*Prov. Medical and Surgical Journal.*

M. Colombot's Method of Reducing Dislocations of Orbicular Joints. Professor Williams, of Dublin, thus describes M. Colombot's method:—'In place of practising graduated extension by any mechanical force, all the muscles surrounding the joint are placed in an intermediate state between flexion and extension, so that they may be in the greatest possible state of relaxation; they are then to be taken by surprise, by suddenly rotating the limb, a manœuvre which infallibly replaces the head of the displaced bone.'

When the hip joint is implicated, the reduction is to be effected as follows:—'The patient is placed erect, the weight of the body being supported on the sound limb; the trunk is then flexed, so that the thorax rests on a bed or table corresponding to the height of the pelvis, and the patient grasps with his hands the opposite edge of the bed or table with the view of fixing the trunk.'

'The surgeon stands behind the patient, on the inner side of the affected limb, if the displacement is anterior to the cotyloid cavity, external to the limb, if the case be one of posterior dislocation; the dorsum of the foot is grasped with one hand and the leg is bent on the thigh; while with the other hand placed in the popliteal region, moderate pressure from above downwards is exerted, so as to put the muscles insensibly on the stretch. The limb is at the same time directed somewhat from within outwards and from behind forward in order to dislodge the head of the femur from its new situation and render it moveable.'

'The surgeon now promptly communicates to the thigh an orbicular motion, rotating it circularly, from within outwards or from without inwards, according as motion in one or the other direction may be more conveniently effected, and the head of the bone re-enters its articulation with a snap. By this process the head of the femur is replaced in the cotyloid cavity, which becomes the centre of the motion of circumduction.'

Six cases are detailed, in which dislocation of the hip was reduced by the method here described. And in the same volume it is stated that M. Lefebvre has employed M. Colombot's plan with the greatest success, not merely in recent cases, but in dislocations of the hip joint which had existed for two months and even for a year. The number of cases on which M. Lefebvre operated is not, however, mentioned, nor are any of the cases given in detail, an omission which, of course, materially lessens the value of the statement respecting M. Lefebvre's experience, and which is to be particularly regretted as regards the cases of dislocation of long standing, in which this simple method of reduction is alleged to have been successful.

[Professor Williams brings before the Surgical Society of Dublin, two interesting cases where the above practice was adopted, and in one with perfect success. It becomes a question, therefore, whether the mode of reduction almost universally adopted, namely, by extension and counter-extension, may not be too implicitly relied upon; for we cannot forget that in dislocations of the femur, for example, the direction communicated to the head of that bone, and the mode of impelling it in a suitable direction, although by no means overlooked, are often regarded as secondary considerations, the extension and counter-extension being chiefly considered: in these cases traction is often exerted in a direction not *materially* deviating from the parallelism to the axis of the body.]

As to the position in which the limb should be placed, while traction is being performed, theory clearly indicates that the thigh should be flexed on the pelvis, and the leg flexed on the thigh, inasmuch as this great obstacle to the reduction of the dislocation is muscular resistance; and this obstacle is manifestly diminished in proportion as we succeed in relaxing the muscles. But the double flexion of the thigh and of the

leg effects this object in a very remarkable degree; the greater number of the muscles of the thigh being thus relaxed, because their fixed points are approximated, and the powerful triceps does not come into play, inasmuch as all its attachments are inferior to the hip-joint. Surely this simple and painless method of *obviating* muscular power is far preferable to *overcoming* the same force by the employment of the warm bath and venesection, the administration of tartar emetic, and the application of mechanical violence. Moreover, flexion of the limb tends to keep the muscles relaxed *while traction on the limb is being made;* whereas if the force is applied while the limb is itself extended, (that is to say, in a position more or less parallel to the axis of the body,) the mechanical traction tends to put the muscles still more on the stretch, and thus excite them to a more energetic resistance.

If it be true that flexion of the thigh and of the leg relax those muscles that are the chief obstacles to reduction, the second point under consideration may be briefly disposed of; for if the force to be overcome is thus diminished, the amount of traction necessary to antagonise that force may be proportionally diminished also.

The position of the limb most favorable to relaxation of the muscles is fortunately the position also most favorable to coaptation, for flexion of the leg upon the thigh gives us a powerful lever (consisting of the entire length of the leg) which may be made of the most essential service in directing the head of the dislocated bone into its articular cavity.

These theoretical considerations would, of course, be of no weight, unless borne out by practical experience; but we find that many eminent surgeons have given more or less sanction to the principles for which I contend; and there are numerous cases on record showing that by their application dislocations of the femur may often, at least, be reduced with a facility which contrasts very favorably with the results of the ordinary method.

Hey and Kirkland (Hey's Practical Observations in Surgery, 3d Edition, p. 320,) adopting the method of flexing the thigh on the pelvis, and the leg on the thigh, making use of the entire length of the leg as a lever to rotate the thigh, in dislocations of the femur into the thyroid foramen; but neither of these emiment surgeons extended those principles to the reduction of dislocations of the femur on the dorsum of the ilium.—*N. Y. Lancet.*

The plan adopted by M. Colombot does not materially differ with that of Dr. Crook, as the reader will find by referring to his article in a previous part of this number.—[Ed. Rec.

Fete at Bicetre.—A most singular and interesting exhibition recently took place at Bicêtre, the Insane Hospital near Paris. A vaudeville was performed by several of the inmates of the establishment, before their comrades. The orchestra was directed by Mr. Florimond Rouger, a young Parisian artist, who has devoted his time and talent to instructing and amusing the insane. A prologue was written and spoken by M. Duclos, a man of letters, completely insane, but whose verses do

not betray more incoherence of thought and expression, than those of many other mad poets, whom the public never thought of sending to Bedlam. The vaudeville was "l' Ours et le Pacha." The Pacha was a lype-maniac, who several times during the performance relapsed into his ordinary train of thought, but always resumed his part in turn. Roxelane was played by a young epileptic, who had an attack as she was going on the stage, but which did not cause her to forget a word of her part. The rest of the characters were filled by lunatics and epileptics. The choruses were well sung, and the parts all well played, and, in the language of one who witnessed this unique and thrilling performance, "If you had not been in the secret, you would never have supposed that you were at a play acted by insane, and in the midst of a pit of madmen and epileptics." M. C.

Phil. Med. Exam.

Iodine for the Dropsy after Scarlet Fever.—Mr. Copeman, of Coltishall, writes thus in the Medical Gazette, in reference to dropsy after scarlet fever:—

"From having observed its power of strengthening the constitution, with, at the same time, a tendency to prevent inflammation and to increase absorption, I was induced to make a trial of iodine. I prescribed it in the form of solution recommended by Logul, viz.:—R. Iodin. gr. xx.; Iodid. Potass. gr. xl.; Aquæ oz. vij. M. ft. Solutio Iodin. concentr.

Of this solution I ordered from 5 to 10 drops for children, and from 10 to 20 or 25 to adults, three times a day in water. In the first case in which it was used, it rapidly effected a cure: in consequence of which, I prescribed it in every succeeding case that presented itself, and with the same complete success."

The Employment of Strychnia in Amaurosis.—A laboring boy, 12 years old, received a blow in the right supra-orbital region, by the falling of a pewter vessel which he was endeavoring to remove from a high shelf. At the moment of receiving the blow, he perceived a flash of light in the eye, but could see nothing with it afterwards. In three hours he came under the care of Dr. Dusterberg, of Lippstadt. Immediately above the right eye-lid was visible a small blue spot, of the size of a horse-bean. In the eye-ball itself nothing abnormal could be detected; no trace of opacity or extravasation of blood. The pupil acted naturally, as in the sound organ, but the power of vision was entirely lost in the right eye; so that he was unconscious when it was directed towards the full glare of the sun. He was treated for two months with bleeding, cold applications, mercurial frictions, blisters, drastics, emetics, electricity, and even the frontal nerve was divided; but all in vain: the amaurosis did not in any degree yield. Subsequently a solution of a grain of nitrate of strychnia in half an ounce of rectified spirit of wine was dropped into the eye four or five times daily: the result of which was, that, in fourteen days, sensations of light were experienced in the affected eye, which, under the continued use of the remedy, increased so that he was enabled to distinguish colored ob-

jects. After a period of three months, the power of vision had so far returned that he could recognize bodies at a distance of three feet. At this point the improvement stopped, notwithstanding that the dose of the strychnia was increased, and its endermic application had recourse to. The case, however, may fairly be adduced to show the beneficial influence of strychnia on torpid amaurosis—*Lon. Med. Gaz.* Aug. 5, 1842, *from Schmidt's Jahrbucher.*

On Opium Smoking as a Remedial Agent. By Dr. James Johnson.—[An interesting paper on the opium smoking in China, has been published by G. H. Smith, Esq., surgeon, in Penang, and communicated to Dr. Johnson, who makes the following remarks on the subject:—]

First. I think it will be admitted that the Chinese mode of taking opium by smoking or inhalation, induces the peculiar sedative effects of that drug more powerfully and more speedily than when taken into the stomach.

Second. There can, I believe, be little doubt, that these effects are produced chiefly, if not entirely, through the medium of the nervous system, and not by digestion, absorption, and the circulation.

Third. It does not appear that the casual or temporary smoking of opium is more dangerous or injurious to the constitution than that of swallowing the drug, whether in substance or solution. On the contrary, I believe it is less so, and not so likely to impair the functions of the stomach, liver, and bowels, as when directly applied to the digestive apparatus.

Fourth. The habitual abuse of a drug, by which, in fact, it is converted into a poison, is no argument or reason against its occasional exhibition as a remedial agent.

Fifth. If the above observations be admitted as rational, I see no reason why we should not employ the Chinese mode of inhaling the fumes of opium, in certain dangerous and painful maladies where the common mode is found to be inefficient, and attended with great derangement of the digestive organs. It is clear that we can very seldom induce that profound sleep and insensibility to all mental misery and corporeal pain, by opium taken into the stomach, which we find to be produced by the inhalation of its fumes acting directly on the brain, through the medium of the nerves. Might not the Chinese mode, then, be adopted in tetanus, hydrophobia, tic doloureux (especially of the facial nerves,) violent spasms, and painful diseases that defy the power of opium taken in the common way?

The various preparations of opium might be easily smoked by means of a common pipe, and the powerful effects induced in a very short space of time, without the possibility of their being rejected by the stomach, or prevented from acting energetically on the sensorium, and throughout the whole nervous system.—*Med. Chir. Rev.*

Conium Maculatum in Coxalgia. Dear Sir:—I think that the attention of physicians has not sufficiently been directed to the efficacy of conium maculatum in that distressing affection of the hip-joint—coxalgia. My attention was primarily directed to the article by the late Dr.

Marinus Willett, who assured me that he had employed it in the above-mentioned disease with astonishing success, when every other medicinal agent had proved of no service. Believing the suggestions of this able practitioner worthy of consideration, I have subsequently administered the conium maculatum in coxalgia, and in no instance has it failed to produce unequivocal benefit. Having recently a case which defied a variety of treatment, I exhibited the conium maculatum, and although my apprehensions of success were not sanguine, from the protracted state of the disease, yet the remedy incontrovertibly produced a salutary effect, and a speedy convalescence subsequently ensued. I therefore deem it proper to suggest the more frequent use of this remedy in this very formidable disease. The most convenient form of administering conium maculatum is that of the powdered leaves, in the dose of at least three grains a day, which may be gradually increased. Yours, &c.

Wm. Parkinson Overton, M. D.,
New York, Oct. 10th, 1842.—*N. Y. Lancet.* 178 Houston street.

Rhubarb as an Application to Ulcerated Surfaces.—Dr. Alfred Markwick writes to the Editor of the London Medical Gazette that while externe at the Male Venereal Hospital, Paris, under the justly celebrated and much lamented M. Cullerier, who died some few months since of acute hepatitis, a patient was placed under his care, who had already been an inmate of the hospital upwards of two months, for severe and extensive ulceration of the abdomen, occupying the whole of its right side and greater part of its left. The right wrist was also much affected. He had unfortunately inoculated it from the abdomen. Almost every plan of treatment had been adopted; even the actual cautery had been applied three times, but without producing any arrest to the progress of the sloughing. At the time I entered the hospital (says Dr. M.) he was much emaciated; his face was expressive of great suffering and despair; he had no appetite; his spirits were very bad, so that he would sometimes cry like a child; and he passed restless nights. The application that was then used was a combination of bark and camphor, which was sprinkled lightly over the parts. I continued this for rather more than two months, and he took at the same time sarsaparilla, and iodide of mercury; but he derived no benefit: indeed he became still more emaciated, and he had a perfectly sanguineous appearance. I then suggested to M. Cullerier the employment of the powdered rhubarb. To this he readily consented; and the following morning it was applied, but only in very small quantity, on account of the violent irritation it produced. Over this was placed some linen with holes cut in it about a quarter of an inch apart, (*linge troue*, as it is called by the French,) which was covered with charpie. On removing the dressings the following morning, a decided amelioration was perceptible. The wound had assumed a much more healthy character. M. Cullerier advised some camphor to be added to the rhubarb, if possible, to mitigate the pain occasioned by the application. This was done; but it had not the desired effect. The powder was then only applied every other day for about six weeks, when the ulcers had nearly

healed. His appetite, spirits, and appearance daily improved, and in about a fortnight afterwards he was able to leave the hospital quite recovered. This patient had remained in the hospital four months without obtaining any relief to his sufferings. Six weeks were sufficient to produce cicatrization of nearly the whole ulcerated surface with the rhubarb—a fact which I think sufficiently proves the efficacy of the drug in sloughing venereal ulcers. The patient had no return of the disease when I saw him six months afterwards.—*Phil. Med. Exam.*

Influence of Tobacco on Phthisis.—M. Maurice Reuf has recently published in the Gazette Medicale the following statement on this subject:

In 1836, I published a paper on the influence of tobacco on the health of the workmen in the Royal Manufactories. I there put forth the following statement: 'Pulmonary consumption is rare among the workmen who are engaged from their youth in the manipulation of tobacco; moreover, this disease makes much less rapid progress than it does usually in those who may happen to have the germ of it already developed when they enter the work-shops.' My experience during the last six years has amply confirmed the accuracy of this statement, and, thanks to the improved organization of the medical service in the Royal Manufactories, I am now able to collect materials more easily than hitherto. My only motive, at present, is to direct the attention of medical men in general to the circumstance now mentioned, and to solicit them to examine the question for themselves.—*Ibid.*

On a very simple means of arresting Epistaxis. By Dr. Negrier, of Angers.—This consists in nothing more than closing with the opposite hand the nostril from which the blood flows, while the arm of the same side is raised perpendicularly above the head. In every instance in which he has had recourse to this means during the past three years, M. Négrier has always found that it suspended the hæmorrhage: a fact of which he offers the following explanation.

When a person stands in the ordinary posture, with his arms hanging down, the force needed to propel the blood through his upper extremities is about half that which would be required if his arms were raised perpendicularly above his head. But since the force which sends the blood through the carotid arteries is the same as that which causes it to circulate through the brachial arteries, and there is nothing in the mere position of the arms above the head to stimulate the heart to increased action, it is evident that a less vigorous circulation through the carotids must result from the increased force required to carry on the circulation through the upper extremities.—*British and Foreign Med. Review, from Archives Generales de Medicine.* June, 1842.

Chapped Nipples.—M. Donné is of opinion that this most troublesome, and often most distressing complaint is, very often at least, connected with an altered state of the milk itself. The milk will, in many such cases, be found to be poor and watery, not very abundant, and to contain more or less of mucous matters. The child, being perfectly fed, and finding difficulty in drawing the milk, pulls at the nipple more than usual; and perhaps at the same time its saliva is more saline than usual, and thus contributes to increase the irritation.

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